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NEWS SUMMARY

GENERAL

Nott faces battle on Falklands cost

The £500m cost of the Falklands operation, in the current financial year, may be met by the existing defence budget and will not involve an addition to it, as argued by Defence Secretary John Nott.

Signs of renewed conflict between Mr Nott and Treasury Ministers emerged as the Cabinet had its usual July preliminary discussion about public spending plans. Back Page; Argentine military rift Page 4

Ulster arrests

At least 16 people have been held in a three-day operation by police and troops in Republican areas of west Belfast against Provisional IRA bombers.

Car plants hit

About 15,000 striking black car workers closed the plants of Ford, General Motors and Volkswagen in Port Elizabeth, South Africa.

Air crash: 13 die

Two South African generals were among 13 people killed in a collision between two aircraft near Pretoria.

Police chief slain

A Naples police chief, Antonio Ammaturo, 57, leading the city's fight against organised crime, was shot dead in an ambush outside his city centre home.

Indian vote

Zail Singh, nominated by Indian Premier Indira Gandhi, was elected as the country's President by an electoral college with an overwhelming majority.

Polish talks

The Polish Communist Party's chief policy-making body started talks on how to bridge the gap between the authorities and disaffected young people.

Saudi gift

The Saudi Arabian Government sent Mrs Freda Pearce of Hereford a cheque for £50,000 in answer to her appeal for funds to build a hospice for cancer sufferers.

Quicksand peril

Four Army cadets, all 17, were rescued after they wandered into quicksand off the shore of the river Alt, at Formby, Merseyside.

Channel record

Richard Charlesworth, 18, from *Dover, cut 43 minutes off the* cross-channel record when he swam from France to England in eight hours 52 minutes.

Dinah Shore

A report from a news agency in early editions of yesterday's Financial Times on a case at Uxbridge magistrates court stated that Miss Dinah Shore, the actress and singer, was fined £100 for an offence at a Heathrow Airport duty-free shop. We have since been informed that Miss Shore was not involved in the case, and we apologise for the error.

Briefly. . .

Bolivia's military high command said general elections to restore democracy would be held soon.

Magistrate and two court officials were axed to death in Papua, after elections.

Bomb blast in Ajaccio, Corsica wrecked a Swedish tourist coach.

Four died when their car *collided* with a lorry near Aberdeen.

BUSINESS

Equities add 2.6; pound steady

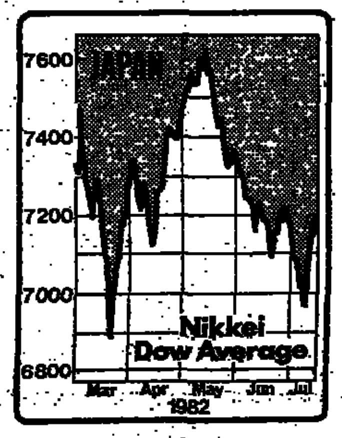
● EQUITIES were boosted by company results, though trading remained thin. The FT 30-Share index added 2.6 at 556.4. Page 27

● GILTS rose about ¼ on interest rate hopes in the UK and U.S. The Government Securities index advanced 0.18 to 71.04. Page 27

● *STERLING* fell 30 points to $1.7205. It was lower at DM 4.295 (DM 4.3), Y440.5 (Y441.5) and SwFr 3.6525 (SwFr 3.6675) but rose to FFr 11.945 from FFr 11.93. Its Bank of England index slipped to 91.0 (91.3). Page 28

● DOLLAR was *little changed* in thin trading, rising to DM 2.4955 (DM 2.494) and FFr 6.9425 (FFr 6.9225), falling to SwFr 2.1225 (SwFr 2.1275) and holding steady at Y256.1. Its trade-weighted index was down from 121.5 to 121.3. Page 28

● IN TOKYO the Nikkei Dow market average rose 42.77 to 7,197.77, stimulated by firmness on Wall St and the yen's recovery *against* the dollar. Page 26



● WALL STREET was off 0.19 at 828.20 before the close. Page 26

● GOLD rose $0.5 to $350 in London. In New York the Comex July close was $344.1. Page 28

● BRITISH SHIPBUILDERS plans to cut 1,500 jobs, in an an attempt to stem its £1m-a-month losses. Back Page

● BRITAIN'S 24,000 dockers will black all Cunard ships if the Atlantic Conveyor, sunk in the Falklands conflict, is replaced by a foreign-built ship. Page 8

● UK STEEL production in June, 280,800 tonnes a week, was sharply lower, reflecting decline in demand and rising imports. Page 7

● U.S. industrial output was 0.7 per cent down last month. The Federal Reserve Board said it had fallen more sharply in April and May than earlier believed. Page 4

● EUROPEAN Court of Justice ordered Britain to lift a ban on poultry imports from other EEC countries, saying they were in breach of free trade rules. Page 21

● THAILAND decided to allow the export of natural gas from the Gulf of Thailand but has not accepted any specific development proposals.

COMPANIES

● THORN EMI saw profit before tax for the year ended March 31 up from £94.3m to £105.4m, with the music division significantly higher. Page 18; Lex, Back Page

● DISTILLERS whisky and gin producer saw second-half pre-tax profit up by £9.3m to £112.5m, but the figure for the full year to March 31 was just *behind at* £178.5m. Page 18; Lex, Back Page

BR considers ballot of workforce on network's future

BY PHILIP BASSETT, LABOUR CORRESPONDENT

BRITISH RAIL is considering an initiative to resolve both the train drivers' strike and its long-running difficulties in implementing railway productivity.

Its initiative—reminiscent of the BL survival plan launched by Sir Michael Edwardes, BL chairman—would involve a ballot of the entire railway workforce, going over the heads of union leaders.

It would depend on BR being able to offer its employees the prospect of a long-term future for the railways, based on a firm Government commitment on new funds for investment. These might cover BR's proposals for further electrification of the railways.

Negotiations on this between BR and the Government are delicately poised, but there is some hope that such an investment package may be forthcoming, despite some Cabinet and Treasury opposition.

The proposals being studied stem from the fact that after the railway shutdown, from next Wednesday which seems increasingly likely—Br would re-open in a different form, although parts of the network would remain closed.

BR is considering putting directly to its workforce the idea that the only chance of rebuilding the railways is by working to BR's plan for a modern system, with new investment in return.

Part of that modern system would involve far-reaching changes in working practice, *encompassing not only flexible* rostering—at the heart of the current dispute and other changes BR is seeking, such as single-manning of trains—but also other alterations.

The alternative would be described starkly as a continuously declining railway system.

This scheme would be put to BR's workforce in a ballot, asking them whether they supported this approach. If so, they would be asked whether they would back their leaders in negotiating its introduction.

Clearly, such a question would be expected to elicit a heavy vote in favour. This in turn would probably be of decisive importance if negotiations with the railway unions ran into difficulty over such issues as improving productivity.

BR has had discussions with the independent Electoral Reform Society on the setting up nad conduct of a ballot which *the society has advised would* take two to three weeks to arrange.

While the ballot would not centrally concern the issue of flexible rostering, a vote in favour would go a long way towards settling the whole issue.

In the present strike by the Associated Society of Locomotive Engineers and Firemen, traine drivers yesterday seemed to be still ignoring BR's call for a return to work, despite the warning that they would be sacked and the system shut down if they did not return.

By 4 pm yesterday, 711 drivers had booked on for duty. Of these, 417 were Aslef members — the first time in the strike that the total has passed 400 — and 294 members of the National Union of Railwaymen. The projected total of drivers to midnight was 835.

While this allowed BR to run 1,187 trains by 4 pm, with a projected total by midnight of 1,871, the response from drivers

Continued on Back Page

Thatcher plea to railmen, Page 8
How coal trains broke strike, Page 8
Politics today, Page 17

Fierce battle for Basra as Iran claims successes

BY JAMES DORSEY IN KUWAIT AND REGINALD DALE IN WASHINGTON

IRANIAN and Iraqi forces were fighting fiercely around the southern Iraqi city of Basra yesterday, in what U.S. military officials said could be the largest single battle since World War II.

U.S. Administration officials said that the battle, in a 20-mile stretch of Iraqi territory, had been joined by about 100,000 men from either side.

Tehran Radio claimed yesterday that its troops had advanced to within five miles of Basra, which is Iraq's second largest city with a population estimated at more than 1m. Residents of the city, contacted from Kuwait, said the centre had been evacuated, many people moving to the southern and western suburbs.

Five or six shells a minute were reported to be landing on the town. Basra is Iraq's only major port and has the country's largest concentration of industry, much of which is based on the nearby oilfields.

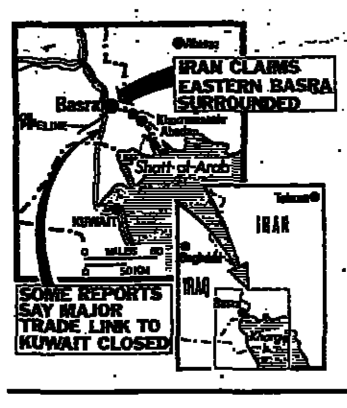
Tehran radio claimed that Iranian troops were encircling the part of the city which lies on the east bank of the disputed *Shatt al-Arab waterway*. An Iranian communique said that two "feeble" attempts by Iraq to launch counter-attacks had been beaten off, and that its troops continued to consolidate positions 12 miles into Iraqi territory.

A statement from Baghdad claimed that the Iranian invasion, launched on Monday, had been halted and its forces thrown back across the border with heavy losses of men and equipment. Iran dismissed this claim as "mere lies." A military spokesman in Tehran added that *the Iranian air force had carried* out "devastating raids" on Iraqi positions in the Basra area, causing "substantial losses and damage to Iraqi armoured units."

Officials in Washington believe that the present battle will be decisive in the 22-month war. If the Iranian forces were to triumph, they could then move on to capture Basra, assume full control over the waterway and deny Iraq access to the sea. The port of Basra and the oil terminals further south have been out of action since early in the war.

Another Iranian objective is to cut the main supply routes

Continued on Back Page



Reagan seeks hosts for PLO

President Ronald Reagan has *sent letters to Arab leaders urging them to accept the 6,000* Palestine Liberation Organisation guerrillas now trapped in West Beirut. Hopes for avoiding a bloody Israeli attack on the city depend largely on the response to this appeal. Back Page

PLO takes initiatives to gain recognition, Page 3

Mail on Sunday hits Associated profits

BY CARLA PAPOPORT

PRE-PUBLICATION COSTS for The Mail on Sunday, the Sunday stablemate to the Daily Mail, slashed interim profits at Associated Newspapers, the UK publishing group, which is the paper's parent. Pre-tax profits for the six months to the end of March were halved to £5.4m from £10.8m a year earlier.

The Mail On Sunday began publishing in early May and has been unable to meet its target circulation of 1.25m. Circulation is now thought to be between 800,000 and 900,000. Earlier this month, Mr Bernard Shrimsley, the editor, resigned. Sir David English, editor of the Daily Mail, was appointed interim editor.

Britain's first new Sunday paper in 21 years. The Mail On Sunday is believed to be still operating at a loss. Before the recent editorial reshuffle, City analysts estimated it was losing at the rate of some £4m a year. Associated Newspapers' directors were unavailable for comment.

In its interim statement yesterday, Associated reported turnover up to £127.5m for the six months, compared with £116.4m a year before. Trading profits had sunk to £1.9m from £7.2m, *while income from associated* companies held fairly steady at £1.8m. Investment income was up from £1.6m to £2.2m in the corresponding periods.

In 1979 Associated Newspapers recorded peak profits of £39.2m on sales of £314m for a 21-month period. In the year to September 1980 the company had pre-tax profits of £22m on sales of £238m. Last year circulation wars and high newsprint costs helped to depress profits to £16.2m on sales of £229m.

The big profit fall reported yesterday did not unduly surprise the City. The company had previously estimated that the Sunday paper would cost £12m, including £3m in promotion costs. The interim dividend of 4.5p net was maintained. The shares yesterday eased 3p to close at 175p.

Results, Page 18
Lex, Back Page

Sizewell B safety report fails to satisfy inspectors

By David Fishlock, Science Editor.

THE GOVERNMENT'S nuclear inspectorate has uncovered a number of shortcomings in the design of the Central Electricity Generating Board's proposed nuclear station at Sizewell in Suffolk, planned for service in 1989-90.

In a critical report on the design for Britain's first big pressurised water reactor for power generation, the Nuclear Installations Inspectorate says, however, that it believes "a satisfactory design is achievable and can be developed to meet the safety objectives."

Only when the NII is satisfied on this count, and that there is little chance of the design having to be changed later for safety reasons, will it grant a licence for Sizewell B, it says.

The critique, based on the CEGB's pre-construction safety report on Sizewell B as the project stood on March 31, is intended primarily for interested parties at the Sizewell public inquiry, which starts in six months.

The five most important issues it raises are:

1—Hazards presented by fire, aircraft crash and earthquakes.

2—Fuel clad ballooning. In *certain cirmustances, the fuel* pins might expand, cutting off the flow of cooling water between them.

3—Integrity of steam generator tubes. Multiple faults could result in radioactive leakage within the plant.

4—The reactor safety system, which is questioned mainly because it is microprocessor-based, unlike systems for previous reactors.

5—Overall safety analysis assessment for the station, "which will require more time and information."

The issues raised do not include the reactor pressure vessel or its containment, the safety of which has previously aroused considerable public interest.

Mr Ron Anthony, chief nuclear inspector, said it was "not our business to proffer *and suggest solutions to the* plant operators."

The inspectors proposed to publish assessments updating their criticisms of the five

Continued on Back Page
Nuclear installations reviewed, Page 7

£ in New York

—	July 14	Previous
Spot	$1.7220-7230	$1.7265-7280
1 month	0.27-0.32 pm	0.28-0.23 pm
3 months	1.10-1.15 pm	1.10-1.15 pm
12 months	4.20-4.30 pm	4.10-4.35 pm

Default called on Ambrosiano Luxembourg

BY ALAN FRIEDMAN

MIDLAND BANK and National Westminster Bank, as agents for two major syndicated loans to Banco Ambrosiano Holdings of Luxembourg, have called a default on $115m (£67m) worth of debt.

Midland Bank and last night it had called a default on Monday on a five-year $40m loan it had led as syndicate agent. *The loan involves 17 banks* including the Bank of Tokyo, International Westminster Bank and Lloyds Bank International. It was completed on July 8 1980 and led by Midland Bank (France).

National Westminster Bank said it had acted to call "an event of *default*" *on* a $75m five-year loan it led as agent in 1981. The default was called just after midnight on Wednesday. The Natwest loan to Banco Ambrosiano Holdings involved a syndicate of 28 banks led by International Westminster

National Westminster Bank *in London said last night it had* acted in the wake of the Midland syndicate's default call because of cross-default provisions in the loans. "Midland was the trigger. As soon as they called a default we had to move as well," said NatWest.

NatWest indicated it expected cross-default provisions in loans made to Banco Ambrosiano Holdings in Luxembourg would "involve a number of other banks." In all, about 250 banks were involved in supplying the Luxembourg bank with medium-term credit.

The Italian rescuing consortium of six banks—the lifeboat consortium which has been formed under the aegis of the Bank of Italy—is not willing to be involved in the Luxembourg bank case.

It is believed that a significant portion of the loans raised by Banco Ambrosiano Holdings of Luxembourg was re-lent to Vatican-backed companies operating in Panama under the umbrella of the Instituto per le Opere di Religione (IOR), the *bank of the Holy See.*

Some of the other loans made by syndicates of banks to the Luxembourg bank are thought to include a five-year $25m loan made in 1980 and led by Landesbank Stuttgart (agent) and a five-year SwFr 50m (£13.6m) loan made *in 1979 by a syndicate led by* Banca del Gottardo—the Swiss bank which is 45 per cent owned by the Ambrosiano group.

Other loans to Banco Ambrosiano Holdings of Luxembourg are thought to include a $10m six-year credit arranged in 1979 *and involving the Bank fuer* Gemeinwirtschaft and others, two 1981 loans for $10m and $40m involving Banca Nazionale del Lavoro, a five-year $10m loan made in 1979 and involving Banque Bruxelles Lambert and a $50m six-year loan made in 1979 with Banca del Gottardo as agent.

It is not known whether these loans will be called into default. In Luxembourg, Ambrosiano Holdings has been placed by the courts under gestion controlée, which freezes all its activities, assets and liabilities for three months.

A report is expected from Luxembourg government experts by September 30.

Plan to extend enterprise zones

BY ELINOR GOODMAN, POLITICAL CORRESPONDENT

THE GOVERNMENT is considering a big extension in the enterprise zone programme, the scheme set up in 1930 to see whether companies could be encouraged into new areas if red tape were kept to a minimum.

An announcement in principle on the expansion, possibly giving the number of new zones but not their location, may well be made before the recess.

Eleven enterprise zones are now in operation. The Government has been waiting to see how they worked out before deciding on an extension of the programme.

Recently, however, Sir Geoffrey Howe, the Chancellor of the Exchequer, who conceived the idea of enterprise zones while *in opposition, said* the Government was reviewing progress so far. He gave a strong hint that the programme might be extended.

Sir Geoffrey launched the zones as an experiment in his 1980 budget to see if rapid business *development could* be generated in small designated areas in which planning and other restrictions were kept to a minimum.

As an inducement, the Government offered any company within a zone 10 years of freedom from rates. It also abolished development land tax and gave 100 per cent allowances on new buildings.

If the Government does decide to create more zones, the likelihood is that the inducements offered would be broadly as before.

Editorial comment, Page 16

CHIEF PRICE CHANGES YESTERDAY

(Prices in pence unless otherwise indicated)

RISES		
Treasury 12¼% 1986 (£30 pd)	£30⅝	+ ⅜
Exchq. 13¼% '92	£103⅜	+ ½
AGB Research	287	+ 14
Beecham	296	+ 7
Braithwaite	125	+ 7
Bulmer (H. P.)	478	+ 18
Distillers	187	+ 13
Dowty	144	+ 9
Eurotherm	442	+ 22
Firth (G. M.)	150	+ 13
Granada A	180	+ 6
Greycoat Ests.	120	+ 4
Henlys	95	+ 9
Hollis Bros. & ESA	14	+ 5
Howden Grp	138	+ 5
London Midld. Inds.	58	+ 9
Mixconcrete	178	+ 63
Thorn EMI	400	+ 10
Trident TV A	73	+ 5
Utd. Gas Inds.	140	+ 40
Shell Transport	392	+ 8
Anglo Amer. Gold	£81¼	+ 1¼
Gold Fields SA	£28¼	+ 1¼
FALLS		
Bowater	193	− 7
Christie-Tyler	22	− 2
Eagle Star	359	− 6
Hambro Life	272	− 5
Heath (C. E.)	357	− 6
NatWest Bank	432	− 6
Pilkington Bros.	193	− 9
Sedgwick Group	167	− 7
Steetley	161	− 8
Utd. Engineering	267	− 8

CONTENTS

For latest Share Index phone 01-246 8026

After seven months of martial law, **Christopher Bobinski** reports on signs of change in the Jaruzelski régime

Apathetic Poland turns away from radical solutions

POLAND'S seven-month-old martial law regime is clearly approaching an end in its present form. It is fast losing the necessary credibility which made such a potent weapon in regaining the initiative for the Polish Communist establishment, and almost everyone wants to see it replaced by something else.

Increasingly, the leadership, under General Wojciech Jaruzelski, sees that martial law is no lasting substitute for more orthodox East European politics. It should give way to measures which retain control over the Polish population, but present some perspective of economic improvement and more scope for free expression and organisation.

For its part, the Communist Party apparatus has grown restive at the army's role in its traditional political domain. It would like to return to a "normal" system on Czechoslovak or Romanian lines, in which the police and the party throttle political free-thinking quite as effectively as any number of military patrols ambling along Poland's streets.

To judge by the number of rumours being floated about the lifting or easing of martial law on July 22, the country's post-war National Day, the people themselves are champing for an end to the current phase in Poland. "People repeat what they want to hear," comments one long-time observer "and this time they are looking to the Government to come up with some ideas on how to get out of this." Maybe General Jaruzelski will give them that when he addresses the Parliament session due for July 21-22.

The underground activists of the suspended Solidarity union also know the mood is turning against radical solutions and that it is the middle ground which now has to be secured. Solidarity's national leadership still at large has ordered its supporters to lie low, at least until July 22. They say they do not want to prejudice the chances of liberalisation or of the Pope's visit next month.

Soundings in factories have shown that rank-and-file workers are not ready to confront the Government openly. Last year's feeling that the people were prepared to take on the system and its Soviet patrons has ebbed away and left Mr Zbigniew Romaszewski, the main proponent of the general strike, in shallow water. The recent arrests of his wife and others involved in Radio Solidarity—the clandestine station in Warsaw—and the seizure of some of the radio equipment, has weakened the radicals in the underground. This radio came on the air briefly this week, but only to say it planned a period of silence to give liberalisation a chance.

The young worker in an early morning queue for cigarettes, who pointed to a muzzled dog and said "they'll have us all muzzled like that in a few months," was making an observation more than a call to resistance. But this does not mean other young men like him could not turn to terrorist-style resistance by the end of this year. "It takes around a year for a real underground to get going and it will be organised by people no one has heard of. I hope the leadership remembers this," one Party member remarks.

Despite the resigned mood, it is not difficult to get a crowd of several thousand out on the streets demonstrating, particularly among the young who are almost uniformly hostile to the system. The Warsaw and Krakow clashes in May and in Wroclaw last month proved this. One of the reasons why the authorities are so very unhappy about the prospect of Pope John Paul coming in August is that he could lift a wide segment of the population out of its current apathy.

The waning of the revolutionary mood among the bulk of the population has been registered with satisfaction by the authorities and by General Jaruzelski himself. His attitude to the Polish people seems to be "if you lie still for long enough, I'll untie you." Thus, he is now known to be in serious discussions with colleagues in the Government about how to replace martial law.

This should be good news for the West. Nato sanctions against Poland and the Soviet Union are beginning to be very divisive inside the West. Western banks are frustrated that they cannot start rescheduling Poland's $5.5bn (£3.19bn) 1982 debt until Western governments do so, while the U.S. has put itself at angry odds with its allies over equipment for the Soviet gas pipeline. Just as introduction of martial law in Poland was the pretext for imposition of Western sanctions, so an end to martial law would presumably spell an end to sanctions.

But the West would be ill advised to hold its breath too long. Even if Gen Jaruzelski is, as establishment liberals say, aware that Poles cannot be ruled indefinitely by the bayonet, his freedom of manoeuvre is limited by the Soviet Union and conservatives inside his own government, who are suspicious of further experimentation in Poland.

Immediate changes are likely to be peripheral — perhaps, freer travel abroad for Poles, partial amnesty and reelase of a sizeable number of the 2,400 people still interned without trial. A steady trickle of people is now being freed from internment camps.

But such steps might be considered window-dressing, compared with basic issues such as release of all internees, including Mr Lech Walesa, demilitarisation of the Polish mines and, most important, restoration of trade unions. Little change is expected here.

The "great debate" which the Government called for in the spring on the issue of reviving trade union activity has, after several months, produced no consensus, not even in ruling circles. The question of whether unions should be organised by industrial sector (the old system) or by geographical region (as Solidarity was) has not even been resolved conclusively. But clearly the authorities are not going to allow another "sorcerer's apprentice" which might escape their control. Even the liberal wing of the establishment is looking for a measure of autonomy for the union, with the Government retaining final control.

The time bomb, which could disrupt the slow timetable of normalisation, is the economy. It is gradually and painfully adapting to the Western credit freeze. Shortage of hard currency has reduced imports from the West by 40 per cent this year. Even should Poland succeed in getting its 1982 debts rescheduled and some fresh credit from the West, its central planners are assuming a long-term decline in the country's hard currency import levels.

Industrial production will be lower this year than in 1981. But output, led by coal extraction from the militarised mines, is now beginning to recover. Production of consumer durable goods is still down substantially, but this is partly due to scarcity of skilled labour. A crucial uncertainty is the 1982 harvest, which officials predict will be an average 20-21m tonnes. Poland has little spare cash to buy more grain imports than the 2m tonnes it has already got on credit, from Canada and France, and a poor harvest would aggravate current shortages.

The drastic price increases last February have, according to the various estimates, depressed real incomes by between 25 and 40 per cent this year. The Government is aware of the danger of civil disorder and industrial disruption in the autumn, against a background of low incomes and empty shops.

Civil disorder would favour the Solidarity radicals. It would also put powerful arguments into the hands of the establishment's hardliners, ready to ditch the General, his flirtations with economic reform and his apparent commitment to controlled political change.

Party seeks to win back young

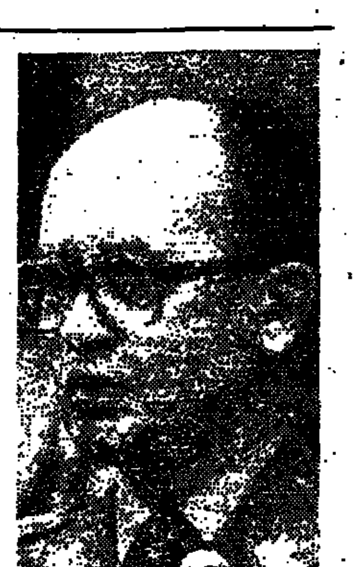
THE CENTRAL committee of the Polish Communist Party met yesterday to discuss the growing gulf between the authorities and the country's young people, one of Poland's most pressing problems, writes Christopher Bobinski in Warsaw. Members of the committee, the party's policy-making body, produced evidence before the meeting which indicates the Government is facing an uphill struggle.

One third of school pupils polled in one area, for example, said they thought the party would never again "regain the trust of the population." In another area, an overwhelming majority believed martial law had been brought in to halt the move towards democracy last year.

Trybuna Ludu, the Communist party newspaper, yesterday published a commentary rejecting the Solidarity union's latest offer of talks. The union's leadership — in hiding from the authorities — recently ordered a moratorium on protest demonstrations until the end of the month and called for an agreement with the Government.

The newspaper said: "There is no, and can be no, agreement with the enemies of socialism, with the anti-socialist underground, and with those who still have not set aside the strike weapon, who distribute hostile publications and encourage young people to demonstrate

In his speech to the central committee, General Wojciech Jaruzelski, the military and party leader, gave little hint that the authorities are planning any large-scale liberalisation. Nor did he suggest that any imaginative policies were being prepared, to counter the alienation of young people who make up a third of the population.



Gen Jaruzelski . . . no hint of relaxation

Turkey to maintain austerity programme

By Metin Munir in Ankara

TURKEY'S NEW Minister of Finance and Economic Planning will persevere with the austerity programme prescribed by the International Monetary Fund but use new tactics, officials in Ankara said yesterday.

The minister, Mr Adnan Basar Kafaoglu, replaced Mr Turgut Ozal, the Deputy Prime Minister and Supreme Economic Planner. Mr Ozal resigned on Wednesday, after two-and-a half years in charge of the economy. The military leaders had lost faith in his policies.

Mr Ozal refused to work with Mr Kafaoglu, who also replaced Mr Kaya Erdem, Finance Minister — one of Mr Ozal's most faithful supporters—in the Cabinet.

The main problem confronting Mr Kafaoglu is economic stagnation caused by the tight monetary policy and the high cost of borrowing — between 70 and 80 per cent interest per annum.

These factors have led to near-paralysis in the banking system. Commercial banks have drastically reduced their lending portfolios in order to consolidate their liquidity position. Many companies are close to insolvency.

Mr Kafaoglu will attempt to reduce the effective lending rate by cutting taxes, such as the transaction tax on loans, officials say. Some budgetary funds allocated to the public sector will be disbursed to the private sector, which is squeezed between depressed domestic demand and high interest rates.

A formula will be found to help ailing private companies, which include some of the largest holding companies.

Legislation will be introduced to discipline banks and their issue of bank certificates. The restrictions on money will be relaxed, in order to increase domestic demand.

Both Mr Bulent Ulusu, the Prime Minister, and Mr Kafaoglu's close associates affirm that there will be no diversion from the course of austerity. But it remains to be seen what effect the new Finance Minister's policies will have on the inflation rate which is running at 30 per cent.

Some eonomists suspect that in his drive to help ailing banks and companies, Mr Kafaoglu might expand the monetary base in a way which might fuel inflation, undermining more than two years of progress towards stability.

Mr Kafaoglu also believes that Turkey must have a fresh look at its relations with the IMF, in view of the development which has taken place in the Turkish economy since the Turkey-IMF stand-by agreement was signed some two years ago.

Mr Kafaoglu started his career in the Ministry of Finance, which has a reputation for being the most conservative and among the least outward-looking of the ministries.

He was adviser to several large private companies in Istanbul, when he was summoned to Ankara after the coup of September, 1980 to advise General Kenan Evren, the head of state, on economic matters.

His proximity to the general gave him considerable power, and he gained the reputation for being one of Mr Ozal's fiercest opponents. Under his direction, the Ministry of Finance is expected to predominate over such agencies as the Central Bank, the State Planning Organisation, and the Foreign Capital Department.

Minister faces fight over Dutch aid reform

By Walter Ellis in Amsterdam

THE DUTCH Development Co-operation Minister, Mr Kees van Dijk, faces a protracted battle over his plans for a reformed National Development Aid Commission (NCO). The commission resigned en bloc on Wednesday, after rejecting Mr van Dijk's demand that he should be able to vet their programme in advance.

Now the Minister is left with the task of putting a new commission together in the teeth not only of the outgoing body but also of the left-wing trade union federation, FNV.

The commission was established some years ago to bring Third World causes to the Minister's attention and to co-ordinate and assist the activities of development aid groups within the Netherlands. Mr van Dijk has felt for a long time that it has exceeded its brief.

Despite the row, the Netherlands continues to be the world's most generous *per capita* source of development aid. Last year, it topped the international league of aid donors, with official payments representing 1.08 per cent of the country's Gross National Product, compared with 1.03 per cent in 1980.

In cash terms, it gave more than $1.5bn (£880m)

The Paris-based Organisation for Economic Co-operation and Development last month described the Dutch aid performance as the most impressive individual performance by any OECD member.

Second on the 1981 list came Sweden, with 0.83 per cent of its GDP, then Norway, with 0.82 per cent and Denmark with 0.73 per cent.

But while the volume of aid has continued unabated—Fl 500,800 (£106,380) has just been earmarked for new refugees in Lebanon—relations between the Minister and the NCO have continued to deteriorate.

Mr. van Dijk began his campaign last October, declaring that he intended monitoring more closely the aid his department would give Dutch pressure groups active in Third World affairs.

Then, last January, he warned that he was going to look critically at the way in which the NCO distributed its funds and said that if improvements were not made to the Government's satisfaction, there could be no guarantee of state support beyond July.

Now the commission has resigned. Mr Dolf Coppes, the chairman, said that 20 of the 28 organisations represented had voted against the Minister's plan.

Commission soft-pedals idea of EEC 'crisis cartel' for plastics

BY GILES MERRITT IN BRUSSELS

EUROPEAN COMMISSION officials yesterday made it plain that an extensive study, setting out the full extent of the EEC petrochemical industry's difficulties, will be required before the idea of a "crisis cartel" governing output and restructuring can even be considered.

Executives of seven large petrochemicals and plastics giants met Viscount Etienne Davignon, the Community's Industry Commissioner, in Brussels on Wednesday for exploratory talks on such a cartel.

Viscount Davignon does not appear to have committed himself either way on the desirability of a co-operative framework for the industry that would require Commission approval if it is not to contravene the competition laws of the Community. He has stressed, however, that the case for a crisis cartel should be fully prepared by the producers and presented to Brussels later this year.

According to Commission officials, the need for production disciplines that would regulate output in the five main "building block" categories of plastics is already plain enough. Over-capacity is running at some 35-40 per cent and Commission figures show that both output and consumption in those products—high and low density polyethylenes, polypropylenes, PVCs and polystyrenes—are falling sharply. Output in 1980 was 16.7m tonnes and last year sank to 11.1m tonnes, while consumption dropped to just 10.7m tonnes.

Viscount Davignon

But the Commission's "wait-and-see" attitude toward the formation of a 24-company EEC plastics cartel that could co-ordinate capacity reductions in the industry is also believed to reflect divisions inside the sector about the need for such an arrangement.

Britain's Imperial Chemical Industries, the Royal Dutch/Shell group and West Germany's Hoechst were represented at the Brussels meeting with Viscount Davignon and are understood to have rejected the idea of a "crisis cartel." The driving force behind the notion is believed to be a French and Belgian initiative, and follows earlier representations to Brussels made by Belgium's Solvay and Ato Chimie of France.

In addition to preparing a detailed report on the function and organisation of a cartel, the EEC petrochemical majors are also thought to have been told by the Commission to make a firm decision among themselves on the need for the new grouping before returning to Brussels in the autumn for fresh discussions.

Sue Cameron writes: Imperial chemical Industries has stressed that the discussions with Viscount Davignon were only "exploratory." It found the meeting "helpful" and expects further talks to be held, though "not for some time."

ICI is known to be totally against the setting up of anything resembling a cartel—as are other UK-based companies and the West German producers. The company added: "No proposition for a cartel or for industry restructuring was made by either side."

IMF backs Belgian austerity

By Giles Merritt in Brussels

THE BELGIAN economic austerity plan launched six months ago by the country's new centre-right coalition Government has received a warm welcome from the International Monetary Fund (IMF).

In its preliminary conclusions, an IMF mission yesterday contrasted the current economic outlook in the country with the situation it had found in October 1981.

"We are greatly encouraged by what has taken place in the few months since our previous visit," the IMF officials noted. Last year, they "had expressed great concern at the extent and speed of the deterioration in Belgium's economic situation."

The IMF team described as "important and courageous" the measures taken by Mr Wilfred Martens' Social-Christian and Liberal Government to curb public spending and restore order to the State's deficit-ridden finances.

They also approved of the Belgian Government's current attempts to impose a partial prices and wages freeze, and underlined the necessity for such policies to be continued.

"Continued moderation of wage cost is a prerequisite" to renewed expansion of output and employment, the IMF officials said. "This is incompatible with an early return to the system of wage indexation that prevailed until 1982, the dangers of which have been amply demonstrated."

The IMF position on the Martens coalition's austerity programme matches the similarly encouraging view expressed not long ago by the Paris-based Organisation for Economic Co-operation and Development.

In international terms, such demonstrations of confidence are for Belgium a useful discouragement of further speculative pressures being placed on the Belgian franc.

In domestic terms, they are a valuable endorsement of policies that are particularly controversial in the francophone region of Wallonia.

Portugal abolishes military watchdog

BY DIANA SMITH IN LISBON

SEVEN YEARS of military supervision of Portuguese politics has ended with a sweeping parliamentary vote to abolish the 18-man Council of the Revolution.

Only the Communist Party and its close sympathisers opposed the vote to drop the Council from Article 113 of the 1976 constitution, which lists Portugal's sovereign bodies. Since the review of the constitution began in committee last year, the Communists have done all they could to disrupt the labour and political scene, apparently trying to stave off the demise of a body for whose creation they were largely responsible in the agitated, revolutionary days of 1975.

The way is now clearer for the liberalisation of the economy ardently desired by the Government and the business community.

Four times since 1980 the Council has veteod draft legislation, approved by Parliament, to reopen banking and insurance to private capital. The members of the Council argued that the move would countervene the constitution,

The Council of the Revolution was created on March 11 1975 after the failure of a right-wing coup attempt. Three days later it nationalised the banks and 53 per cent of fixed capital formation in industry and commerce controlled by the banks, which were holding companies. The officers who dominated the Council then were close associates of the Communists. When the revolution cooled later that year, they were replaced by more moderate left-wingers.

Since then, the Council of the revolution, with its ministerial status, large staff and sweeping powers of veto, has come to be blamed by many Portuguese for everything that has held the country back from European-style development. It has been accused of being a parallel Government

It will be succeeded by a civilian Council of the Republic, a constitutional tribunal and a supreme defence council. Its demise some months from now, when the revised constitution becomes law, may not be the magic cure the Portuguese are seeking for their economy. But the fact that, after immense delays in tackling the constitutional review, a civilian Parliament has finally voted this miltiary watchdog out of existence is a strong psychological filip for a country harbouring serious doubts about the capacity of its squabbling politicians.

Mozambique to send 60 for military training

BY OUR LISBON CORRESPONDENT

SIXTY military instructors from Mozambique are to receive training in Portugal under a protocol signed by the governments of the two countries which includes arms supplies to the former Portuguese colony.

Until now, the Soviet Union has been the main influence on the Mozambican armed forces. Indeed, shortly after the Portugal-Mozambique military protocol was signed a senior Soviet general visited Maputo to express Moscow's concern.

Sr Alvaro Cunhal, the secretary-general of the pro-Moscow Portuguese Communist Party, has described the Government's renewed links with Mozambique as a "Trojan horse of neo-colonialism."

The Mozambique Press called this remark "insulting." It is a label that it would not have hung on a Communist party leader's statement as recently as a year ago, before two very succesful tours, first by President Antonio Ramalho Eanes, and then by Prime Minister Francisco Balsemao, which began a new, constructive era of relations.

Fresh bid for coal industry aid

BY JOHN WYLES IN BRUSSELS

BRITAIN and West Germany are poised to make another bid for EEC financial aid for their coal industries following an acknowledgement by the Ten that the Community is almost totally bereft of a strategy for coal.

However, the Community's two main coal producers look likely to have a difficult job to change minds in several other member-governments, which for four years or more have been hostile to the idea of allocating substantial sums of EEC money to support domestic coal production and investment.

The new opportunity has been presented by an initiative from Denmark as President of the EEC's Council of Ministers. As a result, an *ad hoc* group of experts has been set up with the somewhat vague aim of producing recommendations which would produce a better balance between the interests of coal producers and consumers.

The Anglo-German producers' view is that the pendulum has swung too much in the direction of consumers who have been freely importing cheaper coal from third countries

While contributing to the objective of reducing dependence on oil, this trend is still obviously maintaining a dependence on imported energy.

It is also inhibiting the development of the British and West German industries, which are receiving large amounts of public investments to supply a market increasingly penetrated by imports.

However, Italy and France remain either indifferent or opposed to Anglo-German pressure over coal and there are only slender hopes that the new working group can achieve anything.

Opposition in Spain to £4.6m soccer transfer

BARCELONA — The multi-million-dollar transfer of Diego Maradona, the Argentine footballer, to Barcelona has run into opposition from the Government over the amount of currency which would have to be exported.

The Economy Ministry said yesterday that it had turned down a request from the club to export $8.3m (£4.6m). It said the club would have to earn over half the money outside Spain, but it would be allowed to take out the rest.

But Nicolas Casaus, vice-president of the club, said yesterday: "There is absolutely no problem, we shall have enough foreign currency. Maybe we will just play some matches abroad, but I assure you the club is going to pay its debts."

Barcelona agreed to pay $7.7m for the services of the 21-year-old player. The club said the money would be paid over six years to two Argentine clubs.

Reuter

DOUBTS CAST ON OECD GROWTH PROJECTION OF 3.25% NEXT YEAR

Forecasters split on W. German economic recovery

BY JONATHAN CARR IN BONN

"ALL clear-headed experts deny that we can achieve 3 per cent real (economic) growth in 1983," a West German opposition spokesman said yesterday, in an attack on what he felt to be the Government's over-optimistic economic projections.

According to that definition, the Organisation for Economic Co-operation and Development (OECD) would seem to be a muddled and inexpert body. In its report on West Germany, released today, it says it expects 3.25 per cent real growth (after inflation) in 1983, after 1 per cent this year.

It also sees the country's current account surplus roughly doubling in 1983 to $4.75bn (£2.8bn) thanks to a record visible trade surplus and the increase in consumer prices dropping to a rate of 3 per cent.

To round off this glowing picture, the OECD sees a marked boost in fixed asset investment and private consumption. The only blot is that despite the economic upturn, unemployment will rise too—above all, because more people will be coming on to the labour market.

That said, the OECD also draws attention to the risks involved—as though faintly worried by the boldness of its own projections. Indeed, rarely has there been so great a division of expert opinion on the timing and extent of a German economic upswing. That even applies to this year—let alone to 1983.

The Bonn Government is still sticking to its projection of around 1 per cent real growth in 1982, while four leading economic institutes expect about 0.5 per cent, and one institute (in Kiel) forecasts "minus growth" (i.e. a contraction of GNP after allowing for price increases).

Last year, the government soothsayers did quite well, forecasting real GNP "growth" of between zero and minus 1 per cent. The actual result was minus 0.3 per cent.

But this year there is going to have to be a powerful economic boost in the second half if the growth projection of Bonn (and the OECD) is to be fulfilled. But it is hard to see where this boost will come from.

True, foreign sales remain strong (helping bring a visible trade surplus of DM 19.6bn (£4.2bn) in the first five months compared with one of DM 4.6bn in the same period of 1981.)

But foreign orders have dipped and there have been few signs of a recovery in domestic demand. The building sector began to look more lively—but the fall in interest rates which helped bring this modest improvement has stopped, and even begun to reverse.

Add to that, new problems in the steel sector, President Ronald Reagan's intensified trade sanctions against the Soviet Union and the invasion of Iraq where German companies have heavy interests—and it becomes clear that the risks have markedly increased, even over the past few weeks when the OECD report was being drawn up.

The "minus growth" pessimists are not bound to be right. West Germany's relatively low inflation rate (5.8 per cent at an annual rate in June) and this year's reasonable wage settlements (around 4 per cent) indicate that the country's export success will continue, even with only weak growth in world trade.

But even the government's real 3 per cent growth projection next year seems pretty ambitious at present—let alone the OECD's 3.25 per cent.

If growth is less than forecast, then in 1983 the Bonn Government will face less tax revenue, more expenditure on unemployment, more bickering over its budget—and finally a higher net borrowing requirement than the DM 28.4bn currently forecast. It is a familiar picture.

WEST GERMAN ECONOMIC DEVELOPMENT

(% increase or decrease in real terms)

	1982	1983
GNP growth	1	3.25
Gross fixed invest.	−4.75	2.75
Private consumpt'n	−0.75	1.75
Exports of goods and services	8.5	7.75
Imports of goods and services	2.25	6
Consumer prices	4.5	3
Unemployment rate (as % of total labour force)	6.5	7
Current account balance ($bn)	2.25	4.75

Source: OECD report on West Germany, July 17

Romanian pledge

Romania has promised to implement a five-year-old agreement aimed at improving the lot of its Hungarian minority, Reuter reports from Vienna. A communique, published in Hungarian newspapers after an official visit to Romania by Mr Gyorgy Lazar, Hungary's Prime Minister, said both countries agreed to continued support for a 1977 agreement to extend links between Hungary and an estimated 2m ethnic Hungarians in the Transylvania region of Romania.

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Palestinian question strains French link with Jerusalem

BY DAVID HOUSEGO IN PARIS

PRESIDENT Francois Mitterrand came to power with the credentials of a friend of Israel and the hope that Socialist France could play a role of impartial intermediary in the Arab-Israel conflict. But the bombardment of Beirut has agonisingly strained the ties of friendship, and M Mitterrand can no longer claim to have an influential voice in Jerusalem.

This shift was underlined yesterday when Mr Farouk Khaddami, political director of the PLO, saw President Mitterrand as part of the Arab

It is the first time that a PLO leader has been received at the Elysee. The day before, Mr Yasser Arafat, the PLO leader, sent a personal message to M Mitterrand emphasising the "great importance" he attached to the "personal point of view" of the French President.

The period of grace with Israel came to an end abruptly. "This time you have gone too far . . . we completely reject your declaration," said Mr Itzhal Navon, the Israeli head of state this week.

M Navon was M Mitterrand's host when the French President—breaking with France's recent pro-Arab past and the virtual boycott of Israel by foreign heads of state—paid an official visit there in March. Then M Mitterrand annoyed the Israelis by voicing support in the Knesset for a Palestinian state.

M Navon's remarks referred to an unfortunate news conference last week when M Mitterrand let himself be drawn by a Palestinian questioner into a comparison between the conflict in the Lebanon and the German massacre of French civilians at Oradour in 1944.

M Mitterrand, who personally supervises French Middle East policy, has believed since early in the Lebanese conflict that the attempted destruction of the PLO would only produce an embittered guerrilla war in the Middle East. French diplomacy has thus concentrated on seeking an outcome to the conflict which would bring lasting peace through mutual recognition.

The first step in this was winning from the PLO leadership a declaration to the effect that they were willing to pass from a "military to a political phase" of the struggle. The second has been preparing a joint UN resolution with Egypt in the hope that this would win U.S. acquiescence.

PLO takes initiatives to gain recognition

BY JAMES BUCHAN IN BEIRUT

SUGGESTIONS that the Palestine Liberation Organisation (PLO) might be ready to recognise the state of Israel appear to be only one of several ideas being considered in exchange for leaving Beirut.

The PLO, which represents the 6,000 or so fighters trapped by Israeli forces in the city, would expect recognition by the U.S. in return. The organisation's spokesmen speak of "political compensation" for leaving Beirut under conditions which it feels are moving in its favour.

To a great extent the tactics also reflect the new shape of the PLO, squashed into West Beirut where members of the organisation's eight widely different groups must now live and fight side by side.

In these conditions of relative unity, the Fatah organisation, the largest fighting group headed by Mr Yassir Arafat, chairman of the PLO, and the only PLO member group with relations with Saudi Arabia, has a voice which reflects its size and wealth.

Under these circumstances, the influential al-Hassan brothers in Fatah, Hani and Khaled, are said by government officials to be playing a larger role on Mr Arafat's behalf. According to one Lebanese politician, Hani has been seeking a direct meeting with Mr Philip Habib, the U.S. special envoy, on the hills outside the besieged city, while Khaled has been mentioned as joining the special Arab delegation to Washington, comprising the Syrian and Saudi foreign ministers. The timing of this meeting has not yet been pinned down.

Given the public U.S. stand on relations with the PLO, these Palestinian initatives look unpromising whatever the position taken by Israel. Essentially, this Palestinian diplomatic effort is a move towards three-way recognition—U.S.-PLO, PLO-Israel, Israel-PLO—which, if achieved, would change the face of the Middle East.

At the sam time, Lebanese who have proved reliable in the past say that the PLO has made a formal request to the Damascus Government for acceptance into Syria.

The Israeli charge that the PLO is wasting time may have some truth in it. But what the PLO is also attempting to do is to exploit Israel's apparent dilemma by widening the scope of the negotiations with the U.S., and through the U.S. with Israel, away from the fate of West Beirut or its Palestinians to the larger question of the PLO's future in the world. They are encouraged, by the fact that another player—Syria—is now on the diplomatic stage, even if only in the wings.

There are, of course, PLO members who do not wish to leav Beirut despite Mr Arafat's leave Beirut despite Mr Arafat's written pledge, but in the daily and military committees of the PLO, they are under pressure from Fatah's overwhelming authority.

To a much lesser extent, the west Beirut Lebanese left and Moslems also have a voice, though what control they had of the western sector and its politics has been swamped by the Palestinian retreat there. They are mostly anxious for a diplomatic solution which protects them.

However, there remain deep problems of analysis of the implications of the attention focused on events in Iran. Some say these will give unparallelled opportunities to Israel for a quick military solution. Others argue that the U.S. will be more anxious than ever for a diplomatic solution and make major concessions. As usual, everything depends on what Israel can and cannot do.

ISRAEL CONSIDERS COST OF ASSAULT

THE FEAR of economic sanctions by the European Economic Community is one of the factors being weighed by Israel as it considers whether to launch a military assault against the 6,000 Palestinian guerrillas trapped in west Beirut for more than a month, writes David Lennon in Tel Aviv.

Heavy U.S. pressure as well as concern about the likely Israeli military casualties and Lebanese civilian casualties are the dominant elements which have persuaded Israel to permit the prolonged, and so far not very fruitful, diplomatic negotiations to end the crisis.

But Israeli policy-makers are also worried about the negative impact of an assault on Beirut upon Israel's relations with the EEC, and with Egypt — the only Arab country to have signed a peace treaty with Israel.

The EEC is Israel's largest trading partner, with 40 per cent of the country's exports going to the Common Market and some 30 per cent of its imports originating from the Ten. Two-way trade amounts to about \$5bn (£2.8bn) annually.

Jerusalem heaved a sigh of relief at the end of June when the EEC heads made no reference to economic sanctions after their summit in Brussels. But Israeli officials fear that if Israel does invade West Beirut, the Community would impose economic sanctions.

Only two months ago foreign ministry officials were trumpeting the dawn of a new age in relations with Europe, pointing to the unprecedented stream of European foreign ministers who had visited Jerusalem recently. Today they say that Israel's standing in European public opinion is "catastrophic."

The officials look in dismay at the sharp turn about in Europe's attitude.

Even without imposing economic sanctions, Europe has already signalled its extreme displeasure with Israel by suspending the signing of a \$40m aid package.

Individually the European governments have taken concrete steps to register their disapproval. Britain cancelled its invitation to Israel to participate in Aldershot arms fair, France cancelled the scheduled bilateral cultural committee meeting in Paris and Greek stevedores refused to handle Israeli ships.

But whether the threat of EEC sanctions will help to stay Israel's military hand remains doubtful. Mr Ariel Sharon, the defence minister, yesterday warned that "Israel's sword is resting on the neck of the terrorists in west Beirut . . . we will not put our sword back in its sheath until the last of the terrorists disappears from Beirut."

Egypt urges Arab unity over Palestinians

By Charles Richards in Cairo

PRESIDENT Hosni Mubarak of Egypt has called on Arab states to forget their differences and meet to solve the Palestinian problem. He said he himself would be prepared to go anywhere in the world to attend such a meeting. Egypt has ties with only three Arab countries—Sudan, Oman and Somalia. The rest broke off relations because Egypt made peace with Israel.

After talks with the visiting German Foreign Minister, Herr Genscher, Mr Mubarak, speaking at a press conference, urged the European Community to exert pressure on the U.S. to open a dialogue with the Palestinians.

The withdrawal of Palestinian forces from Beirut under Israeli occupation was not the solution to the problem, he said. The failure of the Arabs to unite and agree on a way to solve the problem would make it worse and in turn increase disunity in the Arab world, said the President.

He attributed the three problems in the area—the crisis in the Lebanon, the renewal of fighting in the Gulf war and the outbreak of hostilities between Somalia and Ethiopia—to a game being played by the super powers.

Australia's businessmen diverted by struggle for Labor leadership

BY COLIN CHAPMAN IN SYDNEY

Bill Hayden . . . confident of winning leadership challenge

EACH MORNING this week, in the capital cities of the Australian states, Mr Bill Hayden, leader of the opposition, and his leading shadow ministers on the front bench, have met top bankers, industrialists and businessmen in an endeavour to prove to them that the prospect of a Labor Government is something that they should welcome rather than dread.

The emphasis was supposedly on policy: explaining the decisions that the Australian Labor Party (ALP) reached at its biennial conference in Canberra last week. These include commitments to a heavily interventional economy, the establishment of an economic advisory planning council, the promotion of more Australian ownership, and prices and incomes controls. But the businessmen's attention was inevitably diverted by the leadership clash within the Labor Party resulting from the challenge to Mr Hayden by Mr Bob Hawke the former president of the Australian Council of Trade Unions.

Mr Hayden and Mr Hawke both proclaimed at these breakfast meetings that they have no differences over policy. Both inside and outside the dining rooms Mr Hayden refused to discuss the leadership challenge, to be decided at a meeting of all federal Labor MPs at a caucus meeting in Canberra today, except to express confidence that he will win it.

Mr Hawke, on the other hand, discussed it with anybody who cared to listen. The gist of what he said is that Bill Hayden is a great guy but that if the ALP is to wrest power back from Mr Fraser's ruling Liberal-National Country Party coalition Bob Hawke is the man to achieve it.

With the key vote today it is touch and go. Earlier this week it seemed as if Mr Hayden would romp home as the left wing gave him its support. But on Wednesday the party's influential resources spokesman, Mr Paul Keating, the ALP's key power broker in New South Wales, decided to throw his support and that of the NSW Centre Unity group behind Mr Hawke.

More businessmen warm to Mr Hawke than to Mr Hayden, but neither men, nor stalwarts like Mr Lionel Bowen, the foreign affairs spokesman, and Mr Paul Keating, the spokesman on resources, are likely to be able to win the hearts and minds of Australia's traditionally conservative corporate and financial sector.

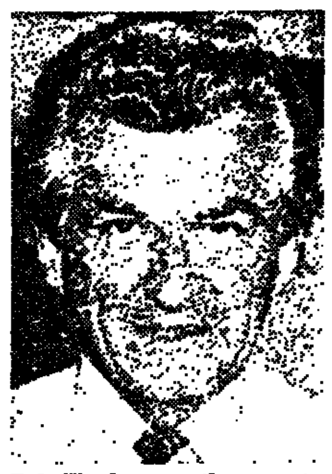
The cornerstone of Labor's economic policy is a social compact, of the kind tried and failed in the Wilson years in Britain, in which policies to reduce unemployment and achieve growth are implemented in exchange for solemn and binding assurances by the trades unions. The essential ingredient of the policy is a gamble: a voluntary prices and incomes policy, on which Mr Hayden, Mr Hawke and Mr Ralph Willis, the opposition spokesman on economics, have been working for two years. There is a plan to convene a nationwide conference of the major unions within the next few weeks to negotiate their compensation.

The ALP leadership argue that a return of the Fraser government will be disastrous for organised labour because further tough monetarist policies and continued high interest rates can only lead to more unemployment. Labour would adopt a different strategy: an expansion of the economy through tax cuts and more public spending in the hope of cutting unemployment.

Questions put over breakfast by businessmen indicate that the ALP leadership are still some way from selling the policy to the trade unionists and that the policymakers themselves are still vague about how it would work.

For example, it has yet to be decided how wide would be the powers of the proposed prices justification tribunal. The Party's business spokesman, Mr John Brown, himself a businessman, argues strongly that retail products should be excluded from scrutiny, which is not acceptable to unionists.

Then there is the issue of protectionism. Mr Hayden would like to see an official industry reconstruction bank to "quicken the pace of industry restructuring" and a steady reduction in tariffs. Others, senior in the leadership, are strong protectionists. There is not, and there will never be, any unity on the subject within the Party.



Bob Hawke . . . the man to wrest power from the ruling coalition

AMERICAN NEWS

U.S. recovery hopes dampened by drop in industrial output

BY REGINALD DALE, U.S. EDITOR IN WASHINGTON

FRESH EVIDENCE of the current U.S. recession's tenacity came yesterday with a report from the Federal Reserve Board that industrial production dropped by a seasonally adjusted 0.7 per cent in June. It was the fourth consecutive monthly decline and the 10th in 11 months.

Downward revisions to the earlier figures for April and May added to the gloom. The Fed now says industrial production fell by 0.6 per cent in May, against an initial estimate of only 0.2 per cent, and by 1.1 per cent in April, instead of the previous figure of 0.8 per cent.

Output has now fallen by 10.1 per cent since last July, raising further doubts over the Reagan administration's claim that recovery is round the corner.

The administration has for some time predicted an upturn in the second half of the year, although it has admitted that the strength and durability of the recovery are uncertain. President Reagan has set great store by the second instalment of his personal tax-cutting programme which came into force on July 1.

Private economists, however, said that in light of yesterday's figures, recovery still looked to be several months away — and possibly not before the beginning of next year. Government officials also admitted privately that earlier forecasts for an annual growth rate of 4 to 5 per cent in the second half of the year should be scaled down to nearer 3 per cent.

The latest disappointing figures followed reports earlier this week that consumer spending fell by 1.5 per cent in June and that car sales in the first 10 days of July were more than 16 per cent below the equivalent period of last year.

The output of cars and other durable goods rose in June by 1.7 per cent, the Fed said. But actual sales of cars have been declining, as fewer companies have kept up the special promotions that boosted trade earlier in the year.

Production of non-durable consumer goods fell by 0.5 per cent in June. Business equipment was down by 2.7 per cent. Both construction supplies and intermediate products fell by 0.7 per cent. Output of business equipment is now nearly 15 per cent below last year's equivalent levels.

The Fed said that the fall compared with a total reduction of 14.3 per cent in business equipment output that occurred over seven months in the 1974-75 recession. June saw reduction in most major categories of business equipment, but they were most pronounced in building and mining equipment and manufacturing equipment, it reported.

NY toxic dump area declared habitable

BY OUR NEW YORK STAFF

THE U.S. GOVERNMENT'S Public Health Service has declared that part of the neighbourhood surrounding the Love Canal toxic dump is now habitable. It based its decision on a much-delayed study by the Environmental Protection Agency of the dump, which has been at the centre of a political storm for years.

Love Canal, near Niagara Falls, New York, became an environmental cause celebre in the late 1970s when toxic wastes that had been dumped there 20 years before started seeping into gardens. Residents reported chromosome damage, and 710 households were evacuated between 1978 and 1980.

The Public Health Service's declaration applies to the area more than one and a half blocks away from the canal. The area closer to the canal still has unacceptably high toxic levels, it said.

The report seems unlikely to clear the way for resettlement. Other agencies, using different criteria, maintain it is still unfit for habitation.

Jimmy Burns in Buenos Aires assesses possible effects of a Falklands post mortem

Deeper rift threatens Argentine military

THE DECISION by Argentina's military rulers to carry out an inquiry into the Falklands war is potentially of deep significance for the future direction of the country's politics.

Both President Reynaldo Bignone and General Cristino Nicolaides, his army chief, are hoping to guarantee a period of stable military rule until the promised return to full democracy by 1984. But, by deciding to look at the conduct of individual officers directly or indirectly involved in the campaign, they risk deepening the rifts which already exist within their ranks.

The troubles of Argentina's central institution has left the country with a sense of collective vertigo at a time when the political parties are themselves not fully organised.

There is no tradition of democrotic self-questioning in the Argentine armed forces. They have, after all, refused for over six years even to consider the calls of human rights campaigners to bring to justice some of the more blatant cases of corruption, torture and cold-blooded murder that took place during the campaign against left-wing guerrillas in the 1970s.

The Falklands war, however, has turned military tradition—forged in the course of this century around the concept of national security and an unrivalled hold on domestic politics — inside out for the Argentine armed forces. There was no precedent for a humiliating defeat in an international war.

The regime has found itself not only tramelled by a dusty military code that specifically requires an investigation in the aftermath of surrender, but also by intense and widespread pressure for a post-mortem.

In the wake of the Falklands war, the doublethink induced by government propaganda has given way to something more approaching reality. The generals picked their conscripted army for the Falklands from outlying and isolated regions of Argentina, rather than from the more politically emotive Buenos Aires.

In defeat, returning prisoners of war have been submitted to intense psychological debriefing sessions conducted by military intelligence before being allowed to talk to their families. But these tactics have not succeeded in quelling the eye-witness reports eagerly picked up by the local media anxious to get their revenge on the authorities for months of misinformation.

Many conscripts and non-comasioned officers are believed to have been hastily discharged already, but the bitterness has persisisted and is filtering out through junior and middle-ranking "professional" officers. Most of them are demanding not only a purge of "guilty" superiors but a thorough reorganisation of the armed forces.

It is evident that former president Gen Leopoldo Galtieri, ousted in a bloodless palace coup soon after the surrender of Port Stanley, was not a lasting scapegoat. Only with the return this week of the last remaining prisoners of war led by Gen Mario Benjamin Menendez, the former commander of the Argentine garrison in Port Stanley, has the post mortem entered its decisive stage. The latest group to return includes not only conscripts but also two other generals, one admiral, an air force brigadier and at least 100 junior officers.

It will not be easy to establish blame for the decision to invade the Falklands on April 2 without implicating most of Argentina. "The Malvinas" as every Argentine will never tire of telling you, is the one issue which has always united the country. In the aftermath of the invasion on April 2 it was the fact of having the islands which mattered rather than the methods used to get them. When the military surrendered, however, explanations were definitely required as to why they were lost.

Returning conscripts have talked about being badly fed and clothed, and of being provided with inadequate equipment with which to fight the British. A number of them have painted a grim picture of having to face heavy artillery with rifles that jammed at the last minute. There has also been much talk of corruption and cowardice among senior officers.

There has been intense criticism within the military of the use of conscripts and of the general strategy pursued for most of the war. In particular, the decision not to throw more troops at the British when they first landed and to gamble instead on a defensive "Maginot line" around Port Stanley rather than to fight harder for Goose Green and Darwin has come under scrutiny.

Early on in the war Gen Menedez pledged publicly to fight to the "last drop of blood." He chose to put 20 soldiers in each trench, rather than three or four, thereby needlessly sacrificing many young men in the heavy British artillery fire. In the end, however, the surrender came so quickly that many soldiers could hardly understand it.

The prestige of the army has emerged clearly bruised from the Falklands war, and it is within its ranks that the coming debate is likely to be the fiercest.

In comparison, the air force and navy remain, in terms of public opinion at least, rather less culpable. This might partly explain why Brig Lami Dozo and Admiral Jorge Anaya made such a show about leaving the junta. Even if they return into the fold over the next few days, as some observers predict, the rumblings within the military are likely to continue.

Nicaragua claims invasion by Honduras

By Anatole Kaletsky

THE NICARAGUAN Government claimed yesterday that Honduras had launched an invasion intended to overthrow Nicaragua's left-wing Sandinistra regime.

"A big well-organised military force" had penetrated Nicaragua under the cover of right-wing guerrilla attacks on numerous frontier posts between the two countries, Sr Luis Carrion, Nicaragua's vice-minister for the interior said yesterday.

Both Honduras and the U.S. state department have denied the Nicaraguans' invasion claim. There has been sporadic fighting on the Honduras-Nicraguan border throughout this year between the Nicaraguan army and anti-Sandinista guerrilla forces.

According to the Sandinistas, the Honduran armed forces have been increasingly involved in these clashes, and have been strongly encouraged by the U.S.

A state department official said that yesterday's invasion claim was "just the latest example of the Sandinistas crying wolf as a pretext for maintaining their military alertness and putting their people under even tighter political control. Honduras would not have the military resources to attack Nicaragua even if it wanted to."

The President of Honduras, Sr Roberto Suazo Cordova, was in Washington this week to seek more military and economic aid from the U.S.

IMF team to examine plans

BUENOES AIRES—A team of officials from the International Monetary Fund arrived for talks with Argentine authorities on the Government's new financial policies.

Its leader, Christian Brachet, said it would try to evaluate Argentina's chances of puling out of its economic difficulties, which include foreign debts of \$35bn equal to 3½ years' exports, much of which is due to be repaid shortly.

Mr Brachet said that Argentina had no oustanding loans with the IMF and that the team would not draft any policy proposals

Reuter

Anger mounts over gifts that went astray

BY JIMMY BURNS IN BUENOS AIRES

IN APRIL, seven-year-old Gustavo Vidal wrote a note to a "dear Argentine soldier fighting for our nation," wrapped it round a bar of chocolate, and took it to school.

Hundreds of schoolchildren around the country joined in such patriotic contributions to the war effort. Teachers collected the chocolates and letters and took them to distribution points for despatch to the Falklands.

Last week, Gustavo's letter was returned to his mother by some neighbours. It had never left the Argentine mainland. The note was found around a bar of chocolate bought across the counter in a local retailer's store.

Gustavo's case is the latest in a series of revelations which have been appearing in the local media, alleging that military personnel misused voluntary contributions.

The marketing of goods which the civilian population voluntarily donated was denounced publicly this week by Juan Corti, a former military chaplain on the Falklands. He said that he personally was investigating a number of serious allegations made by his parishioners.

"I think the time has come for Argentines to face reality head on, something which they have not done so far," Father Corti said.

Argentina's ruling junta sponsored a nationwide appeal, the "Patriotic Fund," soon after Mrs Thatcher sent the task force towards the Falklands. Within days, thousands of pesos and jewellery, including marriage rings and necklaces, were pouring in to a special account.

Individuals and businesses also made generous donations in goods which were sent directly to military sorting offices.

The Argentine treasury last month claimed that a total of 656bn pesos (£18m) had been received in cash, although no detailed accounting had been published.

Argentina's widely-read satirical magazine Humor this week published a biting attack on the conduct of military officials, claiming that a number of senior officers spent most of the campaign living in luxury hotels on the mainland. The magazine alleges that when the war ended, most of them left without paying their bills.

Such allegations can only fuel the controversy raging within the armed forces.

Haiti sacking may halt loan talks

M MARC BAZIN, the Haitian finance minister and a notable opponent of corruption ad tax avoidance, is among nine members of cabinet who were dismissed by President for Life Jean-Claude Duvalier on Monday. Hugh O'Shaughnessy, Latin American correspondent, writes.

His dismissal may lead to the end of negotiations between the Duvalier regime and the International Monetary Fund (IMF) for a \$40m loan.

During his brief tenure of office M Bazin had antagonised many powerful figure including M Ernest Bennett, M Duvalier's father in law, whom he pursued for back taxes on his import-export business.

WORLD TRADE NEWS

EEC proposals put forward for easing of GSP

BY JOHN WYLES IN BRUSSELS

THE EUROPEAN Commission has sent proposals to EEC Governments for a slight liberalisation of the Community's Generalised Scheme of Preferences (GSP) which confers trading advantages to 123 developing countries.

The proposals cover the years 1983-85 and the reaction of governments should offer an interesting reading of their current protectionist inclinations.

The Community likes to point to the GSP as evidence of its political commitment to expanding trade with the Third World, although in recent years it has been erecting numerous quotas and ceilings on imports so as to shelter its most vulnerable industries.

Industrial products from the GSP countries enjoy tariff free access to the Community but some individual newly-industrialised countries and sensitive products are subject to import limitations.

The Commission is proposing a 15 per cent increase in imports of non-sensitive products and a similar increase in individual country quotas and ceilings.

But it is ruling out any increases at all, and, therefore proposing a fall in real terms, for certain sectors whose EEC industries are in crisis—principally steel, footwear and leather and some chemical products.

Nine new individual country quotas for sensitive products are proposed along with the elimination of seven other country quotas.

Meanwhile, fertilisers and footwear with non-leather outer soles are to be added to the sensitive list which is subject to import ceilings while eight other products would be removed.

On textiles, the Commission is proposing a general 5 per cent improvement in both allocated and non-allocated ceilings except for certain dominant suppliers and state trading countries.

The GSP allowes reduced tariff entry for 324 agricultural products and the Commission is proposing increased preferential margins on 18 products, the inclusion of nine new products, including horseradish, okra, dates and snails, revised quota shares for some products and full access to GSP preferences for products from China.

Thai Government to allow natural gas exports

BY JONATHAN SHARP IN BANGKOK

THE THAI Government has announced after months of hesitation that it will allow the export of some of its supplies of natural gas in the Gulf of Thailand.

The decision was a hard one, since a strong conservative element has opposed any overseas sales, claiming that Thailand would be better served by keeping all its gas for itself.

But the proponents of exports, including Mr Chatichai Choonhavan, the Industry Minister, have successfully argued that the economic benefits of exporting the gas are too immense to ignore.

The most ambitious scheme for exporting natural gas has been put forward by Texas Pacific, which has discovered huge deposits in its concession in the Gulf of Thailand in [illegible] Thai conglomerate of companies.

The proposal is to export gas in the form of liquefied natural gas (LNG) and involves investment of up to \$3.7bn (£2.1bn). The projected export earnings are estimated at \$1bn annually.

Several companies in Japan and South Korea, which would be the most obvious outlets for the Thai LNG, have also made proposals for developing the gas.

The Thai Government decision permitting exports does not in itself give the green light to the proposals by Texas Pacific or anyone else. An official at Texas Pacific said he could not comment because the company had not been formally notified of the Government move.

The Thai Cabinet has ordered the formation of a high-level committee to decide how the new policy is to be [illegible]

British optimism over China coal plans

By Colina MacDougall

BRITISH businessmen are cautiously optimistic about the prospects of participating in China's coal development plans following the two-week visit to Britain this month of a delegation from the China South-West Energy Resources United Development Corporation.

The mission had already visited France, West Germany, Belgium, Spain and Italy.

China's plans for power, transport and coal development in the four south-west provinces of Yunnan, [illegible] and Guangdong involve upgrading coal output in Guizhou from the present 7m tons annually, to 15m in the first phase of the plan and to about 25m in the second phase.

Total investment is planned to be about \$6bn over 15 years.

"This time scale may be a bit short," said one businessman. "Guizhou is like some [illegible] Chinese Shangri-La. Development has hardly begun and some of the machinery to handle its huge coal seams—some run to 6 metres in width—has not been invented yet."

The delegation also explored co-operation in coal development in other parts of China. Apart from at least seven mines, projects are likely to include coal processing and gasification plants.

The Chinese see the financial arrangements for these plans taking five forms: joint ventures, compensation trade, export credit, leasing of a mine site to a foreign company, and outright purchase of equipment.

A key to British participation in these plans will be the availability of cheap finance. Britain has a tiny programme of aid to China amounting to £180,000, though the Government is considering a modest expansion.

While the sums involved may be small, they could provide funds for a feasibility study, especially if mixed with export credit finance.

Only about 30 per cent of the "deposit facility," the \$1.2bn fund set up for China's use by major British banks with the export credit guarantee department in the late 1970s [illegible]

Tony Hawkins in Harare reports on a £134m boost for the Wankie power station

Zimbabwe throws switch for electricity scheme

THE SIGNING in London this week of a £134m financial package for the supply of boilers and related equipment for stage two of the Wankie thermal power station complex is part of a huge public sector investment programme by the Zimbabwean Government designed to reduce dependence on imported electricity and to cater for anticipated load growth in the 1980s.

There was little investment in new generating capacity in Zimbabwe during the 1960s and 1970s following the commissioning of the Kariba hydro-electric power plant in 1960. Work started on stage one of the coal-fired Wankie plant in the early 1970s but was aborted due to economic and financial sanctions. The project was revived after independence in 1980 and is scheduled to come on stream by mid-1983 with a generating capacity of 480 MW.

This will enable Zimbabwe to start cutting imports of electricity from Zambia which currently account for 40 per cent of total usage.

Wankie one will add nearly 50 per cent to existing installed capacity, but even so load growth forecasts still point to a serious shortfall of around 100 MW capacity during the periods of peak demand by 1985. The preferred option for

> There was little investment in new generating capacity in Zimbabwe during the 1960s and 1970s following the commissioning of the Kariba hydroelectric power plant in 1960. Work started on stage one of the coal-fired Wankie plant in the early 1970s, but was abated because of economic and financial sanctions.

Zimbabwe following the commissioning next year of Wankie One would have been the extension of the south bank hydro plant at Kariba. This would provide a further 300 MW capacity at a cost of Z\$110m (£83m) and would come on stream in 1987.

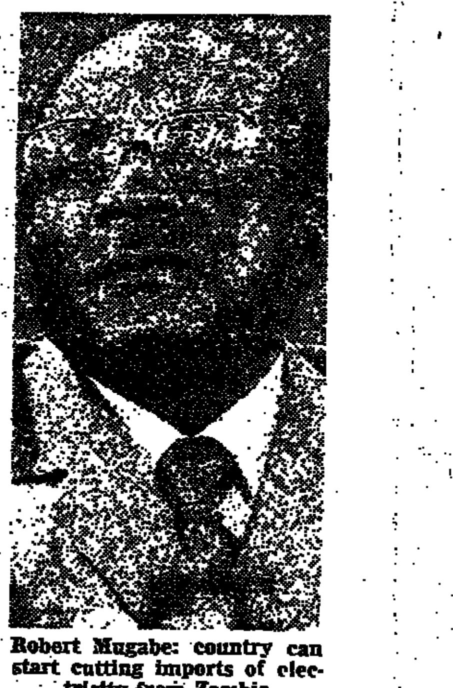
This would be cheaper both in terms of capital and recurrent costs, but since forecasts suggest extra capacity will be needed before 1987, and since it is policy to reduce dependence on imports, the decision was announced in January this year to proceed with phase one of Wankie stage two.

This involves a capital cost, based on 1981 prices, of Z\$188m (£141m) and envisages installation of two sets of generators each with an installed capacity of 220 MW. A further two sets of generators with the same capacity (phase two of Wankie two) were also covered in the contract signed this week with the British-based Babcock International group which will supply the boilers. The extra two sets of generators are optional at this stage.

Two other major contracts have been let for the first phase of Wankie two. The Italian Ansaldo Group has been awarded the Z\$40m (£30m) turbine contract while the contract for high-pressure pipework worth Z\$14m (£10m) has gone to Engineering Development, a British Steel subsidiary.

On the assumption that Zimbabwe goes ahead with both phases of Wankie two—four sets of generators with a total installed capacity of 880 MW—as well as with the extensions to the South Bank of Kariba, Total investment will cost nearly Z\$500m at 1981 prices of which some Z\$315m will represent foreign currency spending.

Weighing heavily on the minds of the Zimbabwean planners must be the cost implications of the alternative longer-run options. Hydro electric schemes—in addition to extending Kariba South—include extension to Kariba North (on the Zambian side) at a cost of Z\$100m for 300 MW capacity. Three other sites, along the Zambesi River would cost Z\$4bn for 4,800 MW of installed capacity.



Robert Mugabe: country can start cutting imports of electricity from Zambia

Libya reduces volume of OECD imports

BY FRANCIS GHILES

LIBYA is cutting the volume of goods it imports from industrialised countries, according to statistics released by the OECD in its latest monthly bulletin of statistics of foreign trade.

Total imports from OECD countries declined from a monthly average of \$1.1bn (£611m) during the last quarter of 1981 to \$597m last January.

Indications from some European countries suggest this trend has continued throughout the first quarter.

Libya has also been delaying payments on goods already shipped out of OECD countries and has sought to pursue barter deals.

However, the backlog of payments to OECD members is estimated to have reached at least \$2bn and senior Libyan officials acknowledge that it cannot be cleared before the end of the year.

This has led certain Western countries to hold back payments to Libya to put pressure on the Libyans.

The Spanish Government re[illegible] such a measure last [illegible] such as Italy, have sought to accommodate the problem.

AVERAGE MONTHLY VALUE OF LIBYAN IMPORTS FROM OECD COUNTRIES: $M

1981	1st quarter	788
	2nd quarter	1,103
	3rd quarter	1,097
	4th quarter	1,108
1982	January	697

Source: OECD Statistics on Foreign Trade, June 1982

Italy's average monthly exports to Libya were running at \$363m last year, a figure which accounted for about one-third of all Libyan imports from industrialised countries.

Agreement was reached—just over a month ago—between Italy and Libya whereby Libya would settle L800bn out overdue back payments to Italian companies, over which there is no dispute while the position of the remainder, L1,500bn will be decided by a special joint commission set up by the two countries.

At the same time, Italy agreed that ENI, the state energy agency, should acquire 100,000 b/d of extra Libyan crude, at prices reflecting those on the European market.

British companies, whose exports to Libya were worth about £500m last year are also complaining of long delays in payments due from Libya.

Some have been paid but the Libyan dinars they hold in Libyan accounts cannot be transferred abroad because they are finding it impossible to obtain authorityt o convert to obtain authority to convert currencies.

Other companies which have signed contracts on which the first downpayment is due are finding it impossible to obtain the Libyan bank guarantees which are a prerequisite to being paid.

Although Libyan output of oil is estimated to have increased recently, maybe to as much as 1.1-1.2m b/d, the average monthly figure is estimated to have been around 667,000 b/d, a 58 per cent rise on last year's average monthly figure of exports and one which would have brought just over \$2bn into the Libyan exchequer during the first three months of 1982.

Col Gadafi

This figure compares with a figure of \$15.7bn in 1981 and \$22.6bn in 1980.

South Africa mines pay push

JOHANNESBURG—The 14,000 underground officials at South African mines are seeking a further pay review with employers after white miners accepted a 12 per cent compromise pay deal earlier this week, according to the Underground Officials' Association secretary Mr Doc Coertze.

The association, a registered trade union representing white senior non-management supervisory staff, is now seeking a 14 per cent pay rise, though it earlier accepted a 9 per cent increase at the annual review.

A Chamber of mines labour adviser said the chamber, which represents employers, told all three officials' associations that it would negotiate a further wage review.

Reuter

Say hello to the new Fiat two-litre.

Introduce your chauffeur to back-seat driving.

We have long been famous for building cars that are enjoyable to drive.

The new two litre Fiat Argenta is no exception.

It offers a combination of smoothness and spriteliness that you won't want to waste on the chauffeur.

One reason is the responsive 113 bhp twin overhead camshaft engine.

Another is the precise five speed gearbox. (A three speed automatic is available as an option.)

The Argenta will nip up to 60 in 11.6 seconds and has a top speed of 105 mph.

Our cars' handling is another feature you will want to experience first hand. The Argenta is a joy to put through corners.

Thanks in part to the low profile P6 tyres and wide sports wheels.

Mind you, the chauffeur need not feel left out. The back seat is an ideal spot to appreciate the opulence of the new Fiat Argenta.

The classic Italian lines, the fine velour upholstery, the thick carpeting that lies underfoot.

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Power assisted steering on an adjustable steering column, electrically operated front windows, central locking and metallic paint. They are all standard equipment.

No matter where you sit, you can't fail to wonder at the cost of our new car.

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A figure that includes one year's free motoring membership of the RAC. And a six year anti-corrosion warranty.

In addition, according to no less an authority than Her Majesty's Government, it will return 36.7 mpg at a constant 56 mph.

Argenta is Italian for silver, but clearly this new Fiat is worth its weight in gold.

The new Argenta £6,345.

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PRICES AND SPECIFICATIONS CORRECT AT TIME OF GOING TO PRESS AND INCLUDE FRONT SEAT BELTS, CAR TAX AND VAT. DELIVERY AND NUMBER PLATES EXTRA. PERFORMANCE FIGURES SOURCE FIAT SpA. THE CRYLA-GARD ANTI-CORROSION WARRANTY COVERS ALL MAJOR PARTS, AND IS SUBJECT TO ANNUAL INSPECTION BY THE DEALER, PAID FOR BY THE OWNER. ARGENTA FUEL CONSUMPTION (MANUAL VERSION): URBAN CYCLE 22.1 MPG (12.8 LITRES/100 KM.), CONSTANT 56 MPH 36.7 MPG (7.7 LITRES/100 KM.), CONSTANT 75 MPH 28.0 MPG (10.1 LITRES/100 KM.). FOR FURTHER DETAILS CONTACT CHRISTOPHER SHELLY, FIAT INFORMATION SERVICE, P.O. BOX 39, WINDSOR, BERKS.

Sharp fall in unit trust investment

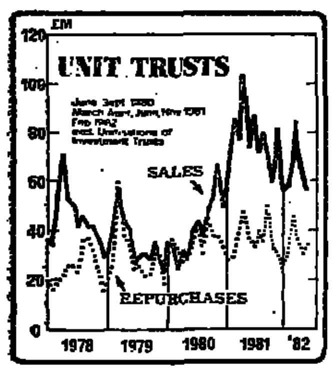
UNIT TRUST investment in the first half of this year amounted to £185.4m, according to figures issued yesterday by the Unit Trust Association. This is less than 60 per cent of last year's corresponding investment.

Sales of units have declined by a quarter over the period, from £539.1m to £407.5m. Repurchases have, however, risen slightly, from £215.5m to £222.1m, contributing greatly to the overall decline in net new investment in unit trusts.

However, 1981 was the best year for unit trust investment, with sales of £995m and net new investment of £528m, both doubled the previous records. The first six months of 1982 can, therefore be regarded as satisfactory.

The growing number of units being repurchased shows a steady growth in the tendency for investors to cash in their units.

Two reasons are put forward for this. Firstly, more and more trusts are reaching



maturity and investors would be realising their investment in the usual course of events.

Secondly, investors are becoming more active in the management of their unit trust portfolios, often taking professional advice. They are selling units to reinvest the proceeds in other unit funds.

Liverpool leisure complex to go ahead

A PLANNING application for a £24m, 32 acre shopping and leisure complex at Liverpool's south docks was approved yesterday by the board of the Merseyside Development Corporation, despite opposition from city centre retailers and local authorities. The decision is the MDC's first conflict with local government.

A consortium of pension funds is considering investing £9.6m in the project.

Objectors say the Pavilion development, which will include an 80,000 sq ft superstore and 40 shops, will damage shopping in central Liverpool, where the recession has already damaged trade.

Yesterday, Sir Kenneth Thompson, the MDC's deputy chairman, said: "If we succeed in regenerating the disused docks, Liverpool will boom again. The city centre shops will do as well as everyone else."

Mr Peter James, the developer, said a bank had offered to lend the rest of the money if the pension fund backing was finalised.

Daily Mail cleared in contempt case

THE Daily Mail and Sir David English, its editor, were cleared by the House of Lords yesterday of contempt of court in publishing an article on the sanctity of life during the "mongol baby" trial last October.

Five Law Lords ruled unanimously that a "public discussion" defence provided by section 5 of the 1981 Contempt of Court Act was intended to prevent the "gagging" of genuine discussion in the press of controversial matters of general public interest merely because of contemporaneous legal proceedings in which those matters might be an issue.

The Daily Mail had published an article by Mr Malcolm Muggeridge in support of a "pro-life" candidate in a by-election during the trial of a doctor, who was later acquitted of attempting to murder a three-day-old mongol baby by giving instructions for the use of a drug which caused the baby to die of starvation.

In February, the publishers were fined £500 by the High Court for contempt. That fine was set aside by the Lords. Sir David had not been fined.

Conference centre project announced

PLANS TO invest more than £20m at Trentham Gardens, a former stately home near Stoke on Trent, to develop a conference and tourist centre were announced yesterday. The developer said the project could provide direct employment for at least 1,500.

Ship simulator opens in Wales

A SHIP simulator, claimed to be the most advanced in the world, was officially opened in Cardiff yesterday by the Prince of Wales.

Cardiff Ship Simulator (Cassim) has been developed by Marconi Radar Systems and Racal-Decca at a cost of £1.5m. Its features include full computer generated simulation of daylight, dusk and night visual scenes.

MoD draws up defence package to protect the Falklands

BY BRIDGET BLOOM, DEFENCE CORRESPONDENT

EXACTLY a month after General Menendez surrendered to General Moore in Port Stanley, the British Government signalled a formal end to the war over the Falklands by agreeing to repatriate the remaining 593 Argentine prisoners.

That was on Monday this week. By Monday next, it is possible that the Ministry of Defence in London will have worked out, in the light of the Government's decision, how it is to defend the Falklands in the immediate post-war period.

Obviously the size and nature of the defending British forces will be conditioned by the nature of the threat the Argentine's are still seen to pose. Argentina has refused to admit to more than a "de facto cessation of hostilities," and while the Foreign Office announced on Monday that it was sufficiently satisfied with this to send the prisoners back, Britain's defence chiefs are inevitably being cautious. They know that Argentina has not given up its claims to sovereignty of the islands, and probably never will. They note that in spite of the depradations of the war, Argentina still has quite a capable airforce and some potentially dangerous ships and submarines.

There is now a great deal of discussion at the highest levels in the MoD about the precise size of the necessary defences. The outlines of what the Chiefs of the Navy, Air Force and Army will recommend to Mr John Nott, the Defence Secretary, are becoming clear.

There are three critical aspects of any defence package.

First is the key importance of extending the runway at Port Stanley, both to assure the air defence of the islands with Phantom fighters and to free the aircraft carrier Invincible for home leave and then other duties.

Second is the need to strike a balance between the actual garrison in the Falklands — whose duties for the next six months at least will also include the repair of war damage — with the desire not to swamp the civilian population.

Third is the problem of finance. Service chiefs recognise that the blank cheque they have had over the past four months to order what they need will not last much longer. All three armed services are also worried that the Falklands could tie down men and materials needed for areas more central to British defence.

Since the fighting ended a month ago, the principal concern on the ground has been to bring order to the inevitable confusion which follows war. The priorities have been dealing with prisoners, re-establishing the civil administration, clearing up the worst of the mess—and bringing home the troops that fought the longest.

Nearly 5,000 men, mainly marines and paratroopers who left the UK last April, have either returned or are on their way back. Some 3,500 men of five Brigade remain: the Welsh Guards are in Stanley itself, and the Scots Guards, who until this week were responsible for the prisoners, are assigned to up-country duties along with the Ghurkhas. Some 600 Royal Engineers have had a critical role in repairs of, for example, the waterworks in Stanley, and will soon extend the runway there.

BRITAIN may lift economic sanctions and remove the total exclusion zone around the Falklands before the end of the month, according to reports circulating in Westminster yesterday. However, the arms embargo would remain.

Admiral Sir John Fieldhouse is to take over as First Sea Lord at the end of the year from Admiral Sir Henry Leach, the Ministry of Defence confirmed yesterday.

It seems that the naval forces have also been reduced by about a half: HMS Hermes, the aircraft carrier, docks on Wednesday and 11 other warships have returned or soon will. The Type 82 destroyer HMS Bristol is now the flagship.

Invincible remains for the time being, with perhaps 12 Sea Harriers on board. There are also eight other frigates and destroyers — two Type 42 destroyers, three Type 21 frigates and three Leander class frigates — with several minesweepers, a range of royal fleet auxiliary tankers and support vessels complete the force of 20 or so RN ships. The Uganda and some 15 to 20 other merchant vessels, including tankers, are also still under charter.

The strength of the RAF, which is flying several ground attack Harriers and helicopters but is principally involved in the enormous transport operation, is still put at around 1,000, divided between the Falklands and the Ascension island base.

The new defence arrangements will probably cover the next 6 to 12 months.

The key elements will be:

- Extension of the runway at Port Stanley to 7,000 ft, to take at least one squadron (around 10) of Phantom fighters. The airport, now taking Hercules C130 transporters will be closed for three or four weeks, probably in August, while Royal Engineers fit U.S.-made alloy matting, currently being transported by ship. The matting should last for up to four years.

There are no plans for a second runway, although helicopters and Harriers will use San Carlos and possibly Darwin.

- Defence of the airport by at least eight Rapier anti-aircraft missile systems, with the possible use of Nimrod reconnaissance aircraft. Some Sea King helicopters have already been fitted with early warning radar. Some Rapiers are to be deployed on West Falkland.
- A land garrison of between 1,500 and 2,500 men, including a detachment deployed to South Georgia. There is some disagreement over the precise numbers of operational soldiers needed in addition to the estimated 1,000 engineers and logistic, HQ and support troops considered essential.
- A naval task force of at least five frigates and at least one nuclear-powered submarine. It has not yet been decided whether an aircraft carrier will be necessary once the airport is extended. Neither is it clear what size merchant fleet, with or without escorts, might be needed.

No estimates of the cost of garrisoning the Falklands have been made public. Mr Nott specifically excluded garrison costs when he said the Falklands exercise up to June had cost "something over £500m." It seems highly unlikely that running costs, at least for the first year, could be less than £50m.

Growth of money supply remains within targets

BY ROBIN PAULEY

THE GROWTH of the money supply remains within the Government's targets but the persistently high level of bank lending to the private sector is starting to suggest that, if continued, it could lead to another overshoot.

Sterling M3, the broad measure of money supply, rose by 0.8 per cent, seasonally adjusted, in Banking June, the four weeks to June 16, according to Bank of England figures published yesterday. This compares with a rise of 1.1 per cent in Banking May.

The broad measure of private sector liquidity, PSL2 (covering sterling M3, building society deposits, national savings and money instruments) rose by 0.6 per cent. The narow money measure M1 (notes, coins and current account deposits), rose by 2 per cent, seasonally adjusted, and the annualised rate remains very low at 6.3 per cent.

It is increasingly likely but not yet definite that this represents a change in habits away from cash and towards greater use of credit cards and non-cash payments.

MONEY SUPPLY

	June	Per cent increase Feb. to June at annualised rate
£M3	0.8	9.7
M1	2.0	6.3
M2	1.2*	9.75*
PSL2	0.6	9.3

* Not seasonally adjusted.

These figures are offset to some extent by the £1.02bn sterling lending to the private sector. This is substantially below the exceptionally high February, March and April figures, each of which was around £2bn and caused considerable anxiety.

However, in those months the central government borrowing requirement was in surplus whereas in May and June it was in deficit as the public sector transactions returned to net expansionary effect. In addition, there was substantial round-tripping in February and March which was not a feature in May and June.

City analysts feel that May and June should have produced bank lending figures well below £1bn and that if the high level persists the money supply targets could be threatened.

The Bank is not anxious to discourage bank lending but does want to offset its adverse monetary effects.

It may be that the authorities would not be too unhappy about a sterling M3 overshoot if the new monetary aggregate M2 (private sector transactions balances) continues to grow slowly.

In June the unadjusted M2 rose at about the same rate of 1 per cent as unadjusted sterling M3, breaking the pattern of the previous six months when M2 hardly grew at all.

SE council warns on churning

BY JOHN MOORE, CITY CORRESPONDENT

THE STOCK EXCHANGE'S ruling council has warned that disciplinary action may be taken if members are found excessively trading clients' accounts.

The council says it has "come across occasional cases in which brokers have traded excessively on behalf of a client, with the primary objective of generating commission income and without due regard for the interests of the client. The practice is known as "churning."

It says most such cases have involved brokers getting a share of the commission from their firms.

The Stock Exchange has issued a code of conduct on churning. The code says that to sustain a charge of excessive trading it must be shown that the account was broker controlled.

An unreasonably high turnover would indicate excessive trading. The turnover rate is defined as the ratio of the total value of purchases in the period under review to the average value of the portfolio in the same period.

"Whether a turnover rate is unreasonably high will depend upon the circumstances of individual cases and on the type of security involved," says the code.

A net profit during trading activity is not itself sufficient to rebut an excessive trading charge. But excessive trading might be presumed if the dealing pattern otherwise generally indicates disregard for the client's interest.

Dealings which do not seem to be in clients' interests would be another indication of excessive trading.

But, the Exchange warns that although the "practice is easier to recognise than define" it will take disciplinary action in churning cases.

- The Stock Exchange has also issued guidelines on payment by brokers for services to non-members. "For a service to be provided (by brokers) at no charge it must be demonstrable that it falls within the traditionally commissioned-financed areas."

Men and Matters, Page 16

TSBs plan regional grouping

BY WILLIAM HALL, BANKING CORRESPONDENT

BRITAIN'S 16 Trustee Savings Banks (TSBs) have finalised plans for a substantial reorganisation of their business, which could lead to a consolidation of their operations into no more than four regional banks, and probably result in an eventual offer for their sale to depositors and staff.

The Trustee Savings Banks Central Board, which excercises certain regulatory and supervisory powers over the TSBs, met in London yesterday. It is understood to have agreed the preferred course for the TSB movement.

The TSBs, which are regulated by the Treasury, have been discussing their future for several months. They are developing into fully-fledged banks and have been given exemption from certain regulations applied to clearing and other banks, under the 1979 Banking Act until 1985. They are anxious to break the ties with the Treasury. They maintain that the latter's regulations are inhibiting growth and leading to a loss of market share.

However, before the TSBs can develop into fully fledged banks they have to sort out the problem of ownership. The group, which boasts assets of £6.6bn and employs 20,000 people, is not owned by anybody, being autonomous unincorporated societies.

The central board is understood to have agreed on the principal features of the new organisation. They will be discussed with Treasury officials and other interested parties over the next couple of weeks. It is expected that a formal announcement will be made this month. The necessary legislation should be tabled in 1982-83.

The TSBs have faced two problems in their efforts to develop into banks as defined by law. The first has been the need to reduce the number of regional banks so as to reap economies of scale while not disrupting local loyalties. The second issue is the question of ownership and it now seems likely that the TSBs will be the subject of a limited offer for sale to their customers (6m or more) and staff.

It is understood that the central board favours a form of ownership which would comply with the relevant Companies Act and be in step with banking legislation.

The 16 TSBs, which have 1,650 branches, made pre-tax profits of £66m in 1981 and have a net worth of more than £500m.

BAe to lead contractors for comet satellite

By Michael Donne
Aerospace Correspondent

BRITISH Aerospace's Space and Communications Division has been appointed prime contractor to the £34m European programme to provide a satellite to intercept and study Halley's Comet when it passes Earth in 1986.

Halley's Comet is visible from Earth every 76-years. It is due to make its next appearance in four years, flashing past the Earth at a speed 50-times faster than a rifle bullet and 150m kilometres away.

To intercept and study such a high-speed phenomenon in space is probably the most demanding technological task yet given to the team of space scientists headed by British Aerospace.

A simple satellite will be built for the task, and it will have only about two hours to study the comet as it passes the spacecraft at 68 km a second.

The £34m spacecraft being prepared for this fleeting mission is called Giotto—after the mediaeval Florentine painter who included in the background of one of his pictures what is now widely regarded as a pictorial representation of Halley's Comet on its appearance in 1301.

The fleeting nature of the interception will test the skills of the BAe scientists and engineers, and the nine other European contractors who will share in the venture, under the aegis of the European Space Agency.

One of the tasks of the Giotto spacecraft will be to study the Coma — the area surrounding the nucleus of the Comet — and the trail of gas and dust that trails behind the comet for a distance greater than that between the Earth and the Moon.

Other experiments will examine the effects of the comet's passage.

These experiments will be prepared at universities including Heidelberg, Berne, and London, with more than 20 industrial companies from nine countries also taking part.

Pharmaceutical exports grow

By Sue Cameron

PHARMACEUTICAL exports of £246.1m in the first quarter were up 27 per cent on the estimate for the same period last year.

Figures from the Association of the British Pharmaceutical Industry show UK medicine imports during the quarter were £85.5m, up 50.6 per cent on the same period in 1981.

The association said yesterday the overall pharmaceutical trading surplus had risen to £160.6m in the first quarter of 1982. This was 16.9 per cent higher than the £137.3m for the first quarter of 1981.

Internal review by civil aviation chief

BY OUR AEROSPACE CORRESPONDENT

A WIDE-RANGING review of the functions of the Civil Aviation Authority (CAA) has been started by Mr John Dent, the new chairman, at the request of Mr Iain Sproat, Parliamentary Under-Secretary at the Department of Trade with responsibility for civil aviation.

The review will cover such matters as whether airlines are required to undertake too much paperwork, whether the charges for the CAA's services are too high, whether the authority is sensitive enough to the needs of its customers, and whether there is "too much bureaucracy and too many bureacrats" in civil aviation.

There has recently been strong criticism of the CAA, especially of the way in which its charges were raised. Mr Sproat said that Mr John Dent, the new chairman was a businessman. "I have asked him to look with the fresh and keen eye of a businessman at the operations of the authority." He is to report to Mr Sproat before the end of the year.

Mr Sproat announced the review when he opened a new administration block for Britannia Airways at Luton.

He also said that he had received from the British Airports Authority plans for the injection to it of private capital, which he would be discussing with Mr Norman Payne, the chairman. This was by way of comment on proposals yesterday by MPs that the airports authority should be broken up and its airports passed to private enterprise.

Sir Keith wants voice in university development

BY MICHAEL DIXON, EDUCATION CORRESPONDENT

AN UNPRECEDENTED step to bring the development of universities more into line with Government policy was taken yesterday by Sir Keith Joseph, Education Secretary.

At present, universities receive their public money through the insulating medium of the University Grants Committee and are free from political influence over their academic decisions.

But Sir Keith has written to Dr Edward Parkes, the UGC chairman, saying that at the national level, "where the university sector's activities impinge on economic and other central policies, the Government must now have a stronger voice.

"At this level there will be some strategic decisions for which it would be appropriate for ministers to take explicit responsibility and to answer to parliament," the letter says.

Education idea opposed

BY ROBIN PAULEY

ANY SEPARATION of education services from local authority corporate management is likely to have the same disadvantages for the consumer as occurred in the National Health Service, a paper published today says.

The paper, by the Chartered Institute of Public Finance and Accountancy, comments on the possibility of financing education through a separate block grant. It says this would enhance professional administrators to the disadvantage of elected representatives and consumers.

The appointed democratic element in the Health Service had difficulty developing a policy-making role, except for those closely identified with the administration such as health authority chairmen.

The institute says education ought not to be regarded in isolation. It was related to social services, housing, cultural and recreational services, and to unemployment counter-measures, and separation would lead to pressure for similar treatment for other sectors, particularly social services. It urges a Green Paper-type debate before final decisions are taken about an education block grant.

Plastics body in debts fight

BY SUE CAMERON

THE British Plastics Federation, the trade association embracing over 350 plastic material and product manufacturers, almost went to the wall last year because of massive debts.

The federation revealed only yesterday just how near it had come to "disaster." Part of the problem had been the result of the alleged "illegal diversion" of £62,000 of its funds.

The Federation had an annual budget of about £500,000. By the end of 1980, it was in debt to the tune of £205,000. Last year the debt rose by another £69,000.

The federation stressed, however, that it was now breaking even. Firm steps had been taken to cut spending and staff had been reduced from 51 to under 30.

A total of £23,000 of the aleged illegally diverted funds had been recovered, but debts still stood at well over £200,000. "We were in a disastrous state," the federation said yesterday, "but the bleeding has stopped. Although we have an accumulated deficit, we believe we can now face the future."

Wiggins Teape to invest £9m in paper mill

By Robin Reeves

THE Wiggins Teape group yesterday announced plans to invest a further £9m at its UK carbonless paper manufacturing mill in Cardiff and to concentrate production on one site by closing its coating factory at nearby Treforest, Pontypridd.

The rundown of the Treforest site will extend over two years and involve the loss of 250 jobs. At present the two sites employ 1,390 people. The move is designed to strengthen the company's leading position in the UK carbonless copying paper market.

Carbonless paper, which Wiggins Teape markets under the Idem brand name, has been enjoying one of the highest growth rates of any product within the paper industry. But the market has been subject to stiff competition from the Continent and Japan, as well as other UK domestic producers.

Wiggins Teape has already invested more than £26m on new papermaking, coating and finishing equipment at the Cardiff site, which the company claims is potentially one of the most efficient carbonles's paper mills in the world.

"By integrating our business on the Cardiff site, which is equipped to make, coat, finish, pack and store carbonless paper, we can begin to realise that potential," Mr Ted Brazington, chief executive of Wiggins Teape's carbonless paper operation, said.

Included in the £9m investment is installation of a second coating machine and the transfer of finishing equipment from Treforest.

- **Senior Engineering** is closing its Phoenix Tubeman stainless steel and carbon tube making works at Darlington because volume and margins are uneconomic and the group no longer expects a sufficient recovery.

The Darlington works will be phased out by early 1983 and the carbon steel tube production transferred to another subsidiary, Phoenix Steel Tube, at West Bromwich. It is expected 300 employees, mainly at Darlington, will be made redundant.

- **Perkins**, the diesel-engine makers, will have reduced its labour force by 20 per cent in 18 months with yesterday's announcement of a further 400 redundancies next week.

The Peterborough-based company, a subsidiary of Massey Ferguson, had originally asked for only 100 voluntary redundancies, but 600 workers applied.

- **Shell Chemicals UK**, which lost £45m last year, is today expected to announce large-scale plant closures and job losses at its Carrington petrochemicals complex in Cheshire.

Roughly half the site's 2,000 jobs are likely to go and some 270,000 tonnes of production capacity could be shut down. The main reasons for the cuts are massive overcapacity, poor demand and weak prices which have hit the whole of Western Europe's petrochemical industry.

Reinsurance market shown up by legal dispute, says judge

BY RAYMOND HUGHES, LAW COURTS CORRESPONDENT

A LENGTHY and complicated legal dispute had shown up the reinsurance market in a very poor light, a High Court judge said yesterday.

Mr Justice Lloyd said in the Commercial Court that for this reason alone he would have thought the 20 or so insurance companies and brokers involved would have settled the case rather than continued with protracted and expensive litigation.

"There must be cheaper and better ways for the market to resolve its disputes," he said.

His comments came after a 32-day court hearing and at the end of a two-hour reserved judgment. In this he held that Groupe Sprinks was liable to Commonwealth Insurance Company of Manitoba, Canada, under a 1975 quota share reinsurance treaty.

The judge rejected third-party claims by Groupe Sprinks, now 100 per cent owned by C. E. Heath and Co., against two Heath group companies and against several reinsurance companies collectively described by the judge as "the Heath pool."

He said this was the second major reinsurance claim recently before the courts arising from the activities of Mr Frank Elger, who carried on business as a marine underwriting manager in Toronto in the 1970s. (The other was Great Atlantic Insurance Company v. Home Insurance Company.)

A peculiar complicating factor of both cases was that companies were found willing to reinsure the Elger marine portfolio without knowing the identity of the insurer and, indeed, before any insurer had been found.

That, said the judge, was the reverse of the traditional course of business. He suspected the explanation was to be found in the sudden boom in reinsurance business which occurred in the 1970s. Reinsurance companies world-wide had been eager to enter the London market. Brokers had been quick to see the potential.

Mr Elger had been a prolific producer. Reinsuring his portfolios had seemed like easy money. Reinsurers had been willing to take a line with little information being given or sought. The judge said: "These two actions have shown how wrong they were."

He said Commonwealth Insurance Company (CIC) had appointed Mr Elger its managing agent with authority to write marine insurance business on CIC's behalf, arrangements being made to cover CIC's liability by reinsurance.

CIC contended that Groupe Sprinks was liable for 29.5 per cent of the losses covered by the reinsurance treaty.

Mr Justice Lloyd said that although the losses had not been finally quantified, at November 30 1979 net losses on a 100 per cent basis had stood at about $9m.

Groupe Sprink's main defences were that there had not been an enforceable contract under which it agreed to reinsure CIC; or, if there had been, that it was made void by material misrepresentation and non-disclosure on the part of CIC.

The judge rejected both defences. He said there had been misrepersentation but there was no independent evidence that this had been material.

There might be cases where the materiality of the misrepresentation was so obvious that the court could make up its own mind without assistance. That, however, was not so in this case where the question of materiality was a matter of degree, on which the court had needed but not received expert help.

On non-disclosure the judge said Groupe Sprinks had been given sufficient information to put it on inquiry. The truth was that Groupe Sprinks had been guilty of a piece of bad underwriting, he said.

On the basis of his finding against Groupe Sprinks the judge did not have to consider CIC's alternative claim against J. H. Minet and Co. for alleged breach of duty in failing to provide valid and effective reinsurance.

Groupe Sprinks's third-party indemnity claim against the Heath pool had been doomed from the start, the judge said. Nowhere was there to be found any agreement between Groupe Sprinks and the pool companies.

Nor had there been, he said, any breach of duty by C. E. Heath and Co. (Marine) or C. E. Heath and Co (International) as Groupe Sprinks's brokers.

There were two disturbing aspects about that part of the case, he said. The first was that it appeared those at Heath handling the business had very little idea of what reinsurance was about. Some had not understood the meaning of retrocession (reinsurance of a reinsurer).

The second was the judge's distinct impression that the main concern of at least some of the people involved, once the scale of the losses had become apparent, had been to save their own skins.

In particular Mr John Bennett, general manager of Groupe Sprinks, had been prepared to rewrite history, sometimes consciously, in order to score a tactical point or extricate himself from the hopeless position in which he had found himself.

Nor did Mr Richard Shaw, then of Heath, emerge altogether unscathed. The judge found part of his evidence unconvincing.

Morecambe Bay gas field outlay reaches £300m

BY NICK GARNETT, NORTHERN CORRESPONDENT

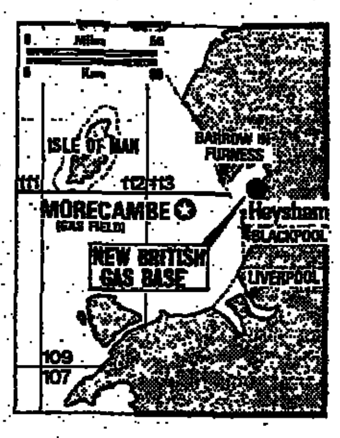
BRITISH GAS has concluded contracts and committed expenditure to a total of £300m so far as part of the estimated £1bn development costs for the Morecambe Bay gas ,eld.

The field is the third biggest gas field on the UK Continental Shelf. It is due to come on stream in 1984 in spite of some initial delays in getting the project under way.

UK-based companies have been awarded virtually all the contracts, the corporation said yesterday. It said it expected this would continue. Further orders and contracts would be placed with British companies "provided that they are competitive in terms of technical capability, delivery and price." The placing of contracts for oil and gas development work has become a sensitive issue during the recession.

The corporation has also this year made two natural gas discoveries in the Irish Sea off Blackpool, south of the Morecambe field. BP has also been drilling in the same area and has a development well close to the Isleof Man.

British Gas said yesterday it would be using Heysham as the drilling and operational base for the Morecambe Bay field—



which contains an estimated 5 trillion (million million) cu ft of gas—provided commercial negotiations were completed satisfactorily.

This is a blow to Merseyside, which had been pressing its case hard but which is geographically much further away from the field. The corporation intends to continue its exploration drilling from Fleetwood and to locate the construction base at Barrow.

The biggest single orders are for two jack-up drilling rigs—one already launched from the Clydebank yard of UIE Shipbuilding and the second under construction at the same yard.

These will service three fixed drilling platforms. Contracts for the fabrication of the first two drilling platform jackets have gone to Howard Doris and McDermott in Scotland.

The corporation said further contracts, involving the central process platford, the accommodation platform and the third drilling platform, will be placed soon.

For the onshore terminal, Barrow's borough council granted detailed planning consent last week for the construction of the terminal's mechanical plant. British Gas said it will let contracts for this work later in the year.

Preliminary civil engineering work for the terminal has been carried out by Balfour Beatty and work on the main civil engineering and building contracts have been started by Christiani and Neilsen (London).

The UK arm of the U.S. company McDermott International is completing the major section of the offshore pipeline connecting the field to the shoreline. The onshore pipeline taking the gas from Barrow to the national transmission system at Lupton is being laid by Murphy and is due for completion this year.

David Fishlock reviews the Nuclear Installations Inspectorate's role in Sizewell B

Chief nuclear critic puts public safety first

MR RON ANTHONY, the Government's chief nuclear inspector, has no doubts about whose side he is on in the nuclear debate.

He is on the side of the public—those who work in, visit or live near nuclear plants—just as much as factory and mines inspectors.

As he sees it, the main task of the Nuclear Installations Inspectorate is "the objective examination of safety." Opponents of nuclear projects should consider that much of his budget is used for criticism of those projects, he says.

Mr Anthony, 56, an aerodynamicist who turned from aircraft to the design of gas-cooled nuclear reactors before joining the NII, expects that, in the next year or so he will face a severe test of the strength of his claim to be the chief custodian of the public interest in nuclear energy.

This forthright and articulate engineer is bracing himself for a public inquiry into plans to build a pressurised water reacor at Sizewell, Suffolk, an inquiry which could last a year.

He expects his professional competence and integrity to be attacked fiercely. He expects public scrutiny of his competence as a custodian of public safety for nuclear engineering and, in recent years, more widely for the Health and Safety Executive.

He knew all this last year when, after five years away from nuclear inspection, he was persuaded to apply for the post of chief nuclear inspector.

The more senior post of director of nuclear safety is to be abolished on the departure of Mr John Dunster from the HSE to become director of the National Radiological Protection Board in the next few days, so Mr Anthony will be Britain's chief nuclear inspector and thus a key witness at the Sizewell inquiry.

Yesterday, Mr Anthony published his first public comment on Sizewell B, planned as a £1.15bn, 1,100 Mw nuclear station, and seen by the Central Electricity Generating Board as the first of a series of perhaps five identical nuclear stations.

In a foreword to the NII critique of CEGB plans, he says his inspectorate's concern is not with electricity capacity and how this should be provided, but with public safety, to ensure "that the installation's siting, design, construction and operation will meet the health and safety standards which we have set."

Mr Anthony concludes that, on the basis of the CEGB's pre-construction safety report there is "no fundamental reason for regarding safety as an obstacle" to building a PWR in Britain. "This means that no difficulty has so far been identified which needs be reparded as insuperable."

Nevertheless, his 88-page report contains enough caveats to keep critics of the project very busy for the next few months. It identifies at least 16 "shortcomings" in the safety case, points on which he still needs to be satisfied. They range from the detailed design and testing of the 435 ton steel reactor pressure vessel and primary coolant circuit, to the general design basis of a new and untried electronic protection system.

‘In the "inspectorate's view, a satisfactory design is achievable and can be developed to meet the safety objectives and give assurance that there will be a small chance of significant changes to the design needing to be made for safety reasons once construction has started. Only when the inspectorate is satisfied that this is the case will a licence be granted.’

The report points out that its aim has been to lay bare the shortcomings in a safety case constructed at an early stage in the project.

Safety assessment is the responsibility for the nuclear inspectors during "a continuous process from the design inception, through detailed design, construction, commissioning, operation and, ultimately, decommissioning."

The report is examining only the design inception stage of this 50-plus year cycle, as it stood on March 31. Sir Walter Marshall, CEGB chairman, said yesterday that, when the CEGP had satisfied the chief nuclear inspector on all design points, the risks would have been reduced to a level where damage resulting from an earthquake in East Anglia posed the biggest public risk.

Of the long list of shortcomings, the report identifies five "where the position is not yet satisfactory:"

- Hazards arising from fire, aircraft crash and earthquakes. An improved case needs to be made or design changes may be required.
- Fuel clad ballooning. An acceptable strategy for developing a safety case has been presented but the case itself is still awaited.
- Steam generator tube integrity. The inspectorate still has reservations about the CEGB case and the effect of many tube failures under fault conditions.
- Reactor protection system. More justification of a computer-based design, novel to nuclear situations, is required.
- Safety analysis assessment will require "more time and more information."

Of the five, Sir Walter believes the CEGB case is most at risk on fuel ballooning, a phenomenon predicted by the UK Atomic Energy Authority. In an accident, the fuel pins might swell to such an extent that coolant could no longer circulate round them.

The risk, if substantiated, could lead the nuclear inspector to downrate the reactor, lessening the PWR's 72 per cent cost advantage claimed over the advanced gas-cooled reactor design. "But I'm betting my reputation that we won't have to do that," Sir Walter said yesterday.

Mr Anthony is reasonably sure that all five problem areas can be sorted out, because the inspectors themselves can see ways of resolving them. "But while we think we can see solutions, we think it is not our business to put them forward," he says.

Thus, the nuclear inspectors reach the conclusion that a satisfactory design for a PWR "is achievable and can be developed so as to meet the safety objectives and give assurance that there will be a small chance of significant changes to the design needing to be made for safety reasons once construction has started." But they stress that they will grant Sizewell B a construction licence only when they are satisfied.

Sizewell B, a review by HM Nuclear Installation Inspectorate of the pre-construction safety report. SO: £5.50.

Steel output fell in June as imports rose

UK STEEL production dropped sharply in June, reflecting the decline in demand and rise in imports which have been developing since early spring.

Average weekly production of 280,800 tonnes in June was 12.5 per cent lower than in May, and 14.7 per cent lower than in June, 1981.

Production dropped most in the Yorkshire and Humberside region, where the average weekly rate of 79,200 tonnes in June was 19 per cent lower than in May and 30 per cent lower than in June, 1981.

A number of works in the Sheffield area, which use electric arc furnaces, extended the May Bank Holiday through the first week of June because of lack of orders.

Production in the northern region, consisting mainly of the British Steel Corporation's Teesside works, was down by 11 per cent to 47,400 tonnes in May, compared to June. Production in Wales was 9 per cent lower in June than in May, but that was due to furnace problems at one BSC works, rather than to a fall in demand for the output of the big strip mills.

The latest import statistics, for April, show a 48 per cent increase from the levels of April 1981, foreign suppliers having taken increasing advantage of the higher prices in the UK market this year.

Imports last year were abnormally depressed by low prices, but the latest figures indicate a substantial 17 per cent rise over the average monthly level of 1979—the last year in which UK production and prices were normal.

More disturbing to UK producers is the sharp increase in imports from outside the EEC. In April, these were 119,200 tonnes, 140 per cent above April 1981 levels and about the same as the average 1979 monthly level.

UK STEEL OUTPUT 1980-1982
Total production of usable steel (weekly average thousand tonnes)

1980	
June	387.9
July	282.3
August	245.6
September	207.8
October	227.6
November	258.2
December	222.9
1981	
January	234.5
February	317.2
March	308.3
April	307.8
May	287.3
June	329.1
July	285.1
August	235.6
September	296.7
October	337.6
November	343.0
December	263.7
1982	
January	283.3
February	340.8
March	328.2
April	314.4
May	320.8
June	280.8

Euroflot loses appeal for release of arrested ship

BY RAYMOND HUGHES, LAW COURTS CORRESPONDENT

AN ATTEMPT to free a Spanish cargo ship which was arrested at Felixstowe last Saturday has failed in the Admiralty Court.

The 3,908 grt Sonia S, owned by Euroflot, of Santander, was arrested as security for claims against Euroflot by two Swiss companies, Catu Containers and SLC, for $333,513 (£193,500) and $120,675 respectively.

Euroflot appealed against the arrest order, made by the Admiralty Registrar, on the grounds that the claims were not within the Admiralty Court's jurisdiction.

Mr Justice Sheen said the claims were virtually identical and involved charges due from Euroflot in respect of a large number of containers leased from the Swiss companies.

Euroflot ran a liner service, principally between Europe and South America. It leased containers and sent them to its customers, who packed their own goods into them and sent them to a port to be loaded onto a Euroflot ship.

Section 20(2)(h) of the 1981 Supreme Court Act provided that "any claim arising out of any agreement relating to the carriage of goods in a ship" came within the jurisdiction of the Admiralty Court.

Euroflot contended that the container companies' claims were for money due under leasing agreements and did not relate to the carriage of goods in a ship.

But Mr Justice Sheen rejected that contention. He said the claims were made by the owners of containers against a shipowner, to whom containers were leased so that the shipowner could provide its customers with a service that included the carriage of the customers' goods in Euroflot ships.

Euroflot's appeal was dismissed with costs. The company was given leave to go to the Court of Appeal on the grounds that the case involved an important point of law.

Breakthrough claimed in letter bomb detection

BY JAMES McDONALD

A MAIL screening device, claimed to be a breakthrough in letter-bomb detection, has been launched by Securicor.

The company believes that the desk-top machine's price of £915 will make it attractive to a considerable business and domestic market.

The electromagnetic device is made by Scanner Electronics, a British company. The most important feature of the machine, says Securicor, is its ability to recognise and ignore harmless metal objects,

Securicor said in London yesterday that false alarms from these harmless objects had tended to give detectors of this type an image of being more of a nuisance than a help.

Also, suggested the company, operators of other machines might respond to a high false alarm rate by setting the sensitivity controls to a level where bombs might pass undetected. Securicor's device has no sensitivity control and a very low false-alarm rate, says the company.

It is also designed to be proof against power surge. Securicor claims that the act of switching on a kettle or electric typewriter in the same room, or even an adjoining room, has been enough to trigger off alarms on other machines.

The mains or battery-operated machine can deal with 10,000 or more letters an hour, and will take parcels nearly 16 in wide and over 2 in thick.

Howe rejects CBI's reflation call

BY JOHN HUNT, PARLIAMENTARY CORRESPONDENT

THE CALL from Sir Terence Beckett, director-general of the Confederation of British Industry, for new Government measures to stimulate demand was rejected in the Commons yesterday by Sir Geoffrey Howe, Chancellor of the Exchequer, and Mr Leon Brittan, Chief Secretary to the Treasury.

Mr Brittan told the House: "You will not reduce unemployment in any substantial, serious or lasting sense by reflation of demand.

"What you will do by reflation of demand is provide a short-term boost, increase inflation, and create a lack of confidence that will lead to higher levels of unemployment than we would otherwise have."

A similar message was given by Sir Geoffrey in a more subdued fashion.

Mr Geoffrey Lofthouse (Lab, Pontefract and Castleford) asked the Chancellor if he was aware that the Cambridge Economic Policy Group had forecast that by 1990 there would be 4.5m unemployed. Sir Terence Beckett, in his meeting with Tory backbenchers on Tuesday, had given warning of the possibility of 3¼m unemployed by the end of this year.

Mr Lofthouse suggested that this meant the Chancellor's economic policies had failed, and called on him to resign if Sir Terence's forecast came true.

Leon Brittan: a boost . . . leading to lack of confidence

The Chancellor said unemployment in Britain had been rising steadily for a very large number of years, but was now rising faster in other countries.

Sir Geoffrey said the answer to these problems was to be found in the Government's determination to fight inflation, to correct the balance of the economy, to restore competitiveness and the capacity of the economy by improved output.

Emphasising his words, he added that it could not be done in any other way and implied rejection of Sir Terence's demands earlier in the week.

Answering questions from both sides of the House on the state of the economy, Sir Geoffrey said: "The turning point was reached in the spring of last year. A gradual recovery has begun and is expected to continue."

One of the Tory "Wets," Mr Patrick Cormack (Staffordshire South West) caustically asked how he saw the economy developing in the West Midlands during the coming year.

The Chancellor said that, if the economy as a whole continued to improve—as the Government thought likely — and if both sides of industry improved their performance, there was no reason why the West Midlands should not share in that improvement.

Mr Geoffrey Robinson (Lab, Coventry North West) asked him, tersely, whether output would be higher at the end of his term of office than it was at the beginning.

There were jeers from the Labour benches when the Chancellor replied: "It is not possible for anyone in any circumstances to give absolute assurances of that kind."

Mr Eric Deakins (Lab Walthamstow) asked what indicators now led him to believe that the recession was ending.

The Chancellor explained that his belief in a gradual recovery was supported by the Central Statistical Office index of leading cyclical indicators and most of the recent independent forecasts.

Industrial production in the three months to May was about 3 per cent higher than in the spring of last year. "The prospect is for further gradual recovery," he maintained.

There was a biting question from another "Wet," Mr Geoffrey Rippon (Hexham), who asked whether the record number of bankruptcies in the first six months of this year—largely due to high interest rates—led the Chancellor to believe that the recession was ending.

Sir Geoffrey pointed out that record bankruptcies were not confined to Britain. But he agreed on the importance of low interest rates and recalled that they were now 4 per cent below the level of last year.

For the Opposition front bench, Mr Jack Straw, a Labour Treasury spokesman, said that manufacturing production was only now returning to the level of July last year, when the Chancellor had said that the recession was ending.

In reply, Sir Geoffrey said that economic growth in Britain, as in other countries, was still "slow and hesitant." Economic growth in some European countries was static or negative.

Thatcher plea to striking railmen

By Ivor Owen

THE PRIME MINISTER yesterday appealed to striking train drivers to avert the closure of British Rail at midnight on Tuesday by returning to work on an individual basis.

In hard-hitting Question Time exchanges in the Commons, she rejected further demands by Mr Michael Foot, the Opposition Leader, for Government intervention to secure a settlement of the dispute.

Mrs Thatcher also urged him, unsuccessfully, to join with her in appealing to the drivers to accept the flexible rosters devised by the British Rail board.

To Government cheers, she declared: "If Aslef will not recommend a return to work, it is up to the individual members themselves to accept the BR board's offer."

Mrs Thatcher's insistence that there would be no need to close the railway system if the drivers, like their colleagues in the National Union of Railwaymen, realised that it was in their own interests to accept flexible rostering, brought an angry shout of: "You don't want a settlement," from Mr Eric Heffer of the Opposition front bench.

Mr Foot protested that it would be an outrage, if in the face of such a major crisis as a shutdown in the railways, Ministers made no attempt to intervene.

The Prime Minister retorted: "I think it is an outrage that you won't appeal to the train drivers to return to work."

Mr Walter Johnson (Lab, Derby South) who is sponsored by the Transport Salaried Staff Association, angered some of his back bench colleagues by stating that the Aslef strike "could not possibly be justified."

Nevertheless, he said, it would be quite wrong to allow the railway network to close because of the damage to the job prospects of those not involved in the dispute.

Mr Johnson's suggestion that the Government should therefore change tack by setting up an inquiry on the understanding that Aslef would call off the strike was rapidly rejected by the Prime Minister.

While agreeing that the dispute was very damaging to all who worked on the railways and to other industries as well, the Prime Minister repeated that a return to work by the engine drivers would keep the railways going.

"There is no future for the railways unless working practices agreed in 1919 were updated," she said.

Mr Roy Jenkins, the leader of the Social Democratic Party, was persistently heckled by left-wing Labour MPs when he argued that the pressure on Aslef to accept flexible rostering and the warnings of the dire consequences if the strike continued should be coupled with undertakings by the Government that the railway system had a secure long-term future.

The Prime Minister recalled that the report by Lord McCarthy had underlined that without progress on flexible rostering the outlook for the railways and railwaymen would be "bleak."

She stressed, too, that the Government had authorised an external financial limit for BR of £900m this year and £930m last year, and that £800m from this source had been used for operating grants.

Dockers to black Cunard if ship order goes abroad

BY BRIAN GROOM, LABOUR STAFF

BRITAIN'S 24,000 dockers will black all Cunard ships if the Atlantic Conveyor, sunk by an Exocet missile during the Falklands conflict, is replaced by a foreign-built vessel.

The order seems virtually certain to be given to a Japanese or a South Korean shipyard. A Cunard team is due to return from the Far East today, and a decision is likely within a week.

Lord Matthews, Cunard chairman, has said the contract is likely to go to the Far East unless a very large Government subsidy enables it to be switched to British Shipbuilders.

Cunard has not given up hope of this, but the Government apparently believes it cannot bend the rules on shipbuilding subsidies as agreed by the EEC and the Organisation for Economic Co-operation and Development.

British Shipbuilders feels that few other governments have such scruples. It has quoted a price of about £45m, compared with South Korea's £33m and Japan's £35m.

Yesterday's blacking decision was taken unanimously by the 22 members of the Transport and General Workers' Union's national docks and waterways committee.

The dockers' leaders said the ship should be replaced in UK yards in view of the fact that British lives were lost on it, and the high level of UK unemployment.

The motion was proposed by dockers at Southampton, where the blacking would have its most noticeable impact. It could halt the passenger liner QE2, which is being refitted for civilian use and will return to service on August 14.

Mr John Connolly, national docks secretary of the TGWU, said: "I have no doubt that the action will be supported in ports around the country."

Also likely to be hit are five fruit ships which call at UK ports, often Sheerness, and four Middle Eastern vessels which sail from Felixstowe.

Cunard said it was saddened by the dockers' decision, but it was bound by legal responsibilities to shareholders to make its decisions on economic grounds.

The Atlantic Conveyor was one of five ships in the five-company Atlantic Container Lines consortium which are being replaced for economic reasons—a decision taken before the Falklands crisis.

It is understood that the other four ships—three Swedish, one French—are likely to be replaced in domestic shipyards.

The docks committee heard yesterday that employers in eight ports had refused TGWU requests to seek membership of the national dock labour scheme.

The dockers called off a national strike threat in May after the Government offered to consider specific and detailed proposals for the inclusion of particular non-scheme ports. The TGWU has begun to approach employers, seeking joint agreement on proposals.

Mine union to shift headquarters

BY JOHN LLOYD, LABOUR EDITOR

THE NATIONAL Union of Mineworkers is to move its headquarters office to Sheffield within the next two years, at a cost of between £2m-£3m.

In keeping with a pledge by Mr Arthur Scargill, the president, that the employment legislation would be ignored, the union will specify that any contractor employed in construction of the headquarters must use union labour.

This will flout provision in the Employment Bill, now close to becoming law, that union-labour only contracts are unlawful. The provisions of this measure were tightened earlier this week.

The NUM executive's decision yesterday followed a vote in favour of the principle of a move-out of London taken at the mineworkers' conference last week.

The council has said it will give a grant to the union of £1,000 for each new job it brings to the area. However, Mr Scargill has told the 33 staff at the present headquarters in Euston Road, that their jobs will be available in Sheffield.

It is understood that the favoured site is in Cambridge Street, close to the City Centre, now occupied by a listed buildin gused as the Sheffield office of the South Yorkshire County Council. However, Mr John Benington, chief officer of the employment department, said several sites, many of them now being used as car parks, were being considered.

● The NUM executive approved a wage claim, conforming to last week's conference resolution calling for a £27.20, or 31 per cent, increase for surface workers, and a similar flat rate increase for other workers.

The claim, presented to the Coal Board yesterday, will also contain a demand for a four-day week and retirement at 55. A separate claim for protection of earnings will be submitted later this month.

● The executive has sought a meeting with the NCB over the future of Britannia Colliery, in South Wales, where a dispute has arisen between the board and the area NUM over development work to a new face. The meeting will also discuss the plan to cease production at Snowdown Colliery, over which strike action has been threatened.

Health body 'baffles public'

By Lisa Wood

THE HEALTH and Safety Commission's techniques of communication and persuasion "lack professionalism, flair and vigour with the result that laymen find it difficult to know what they are doing," a Commons select committee said yesterday.

The Employment Committee, which held an inquiry into the achievements of the commission since it was suggested 10 years ago, said it considered it had a responsibility to ensure that informed discussion and debate took place about health and safety.

"At present, however, the commission appears to keep an unjustifiably low profile, which leads to a lack of public awareness of potential hazards."

The committee added: "A greater understanding could arouse more pressure for improvements, and his, in turn, could for example attract more resources from Government and employers."

Mr John Golding, chairman of the Employment Committee said yesterday: "We are not charging the Commission with neglect. They are an assiduous team, but they are still looking inward."

Right accused of bid to undermine Benn in Bristol

BY ELINOR GOODMAN, POLITICAL CORRESPONDENT

DETAILS OF a plan by Labour right wingers to undermine Mr Tony Benn in his constituency town of Bristol were published in Tribune yesterday.

The newspaper said the right was trying to flood Mr Benn's management committee with trade union delegates. The object was to influence the outcome of selection conferences due next year when constituency boundary changes come into effect. These were, at one time expected to lead to a contest between Mr Benn and Mr Michael Cocks, Labour's Chief Whip, for the one safe Labour seat.

The Tribune allegations attribute a degree of organisational competence to the right more normally associated with the left. It is clearly designed to embarrass the right by drawing attention tothe activities of certain moderate unions. And, in particular, to the way that right-wing trade unionists are being encouraged to register as delegates merely to vote at a few key meetings a year,

Moderates last night claimed to be delighted by the way the article had focussed attention on the tactics that were being used to counter the activities of the far left in Bristol.

Mr John Golding Labour MP for Newcastle-under-Lyme, who was named in the article as one of the right's main organisers, said the message he had taken to Bristol was that htere was no need for ordinay working people to get involved in the "theoretical wrangles of middle class intellectuals."

All that was needed to return the Labour Party to its traditional supporters was for moderates to become delegates to their local party and then turn up to vote at key meetings.

The article was based on a copy of a note of a private meeting held in Bristol last year by Mr Golding and Mr Roger Godsiff, political officer of the Association of Professional, Executive, Clerical and Computer Staff.

Under proposed boundary changes, the number of seats in Bristol comes down from five to four. Mr Benn's constituency is divided among several others, including that held by Mr Cocks. Under the Commission's latest proposals, however, Mr Benn would have a strong claim to the fairly safe Labour seat of Bristol, Kingswood.

The Tribune article claims that the attempt "to destabilise" the Labour Party in Bristol is part of a nationwide campaign by Right-wing trade union officials

Jimmy Hill football tour denounced

Jimmy Hill, the football commentator, at the centre of the row over the team due to play in South Africa, was branded an "overpaid BBC hack" by a Labour MP in the Commons yesterday. He was also accused of "conspiring" with a Tory MP to bolster the standing of the South African Government.

The attack on Mr Hill, one of the organisers of the controversial tour, was made during Question Time by Mr Dennis Canavan (Lab, West Stirlingshire), who demanded a statement on the affair from Mr Neil Macfarlane, the Sports Minister.

Mr Canavan said Mr Hill and Mr John Carlisle (Con, Luton West), who has helped promote the tour, seemed to be involved "in some kind of conspiracy to send a football team to South Africa

Minister attacked as sexist

A MINISTER was accused in the Commons yesterday of being sexist as he faced calls for the abolition of value-added tax on sanitary towels. Uproar broke out when Mr Bruce-Gardyne, Economic Secretary to the Treasury, said he saw no logical reason for singling out one particular hygiene product for special treatment.

He added: "In my experience, most women have a tendency to use soap."

The issue had been raised at Question Time by Miss Joan Lestor (Lab, Eton and Slough).

Mr Doug Hoyle (Lab, Warrington) told Mr Bruce-Gardyne: "That is a sexist remark and you should apologise."

Fisheries accord 'long way off'

BY OUR PARLIAMENTARY STAFF

AGREEMENT ON a common fisheries policy for the European Community is still a long way off, Mr Peter Walker, Minister of Agriculture and Fisheries indicated in the Commons last night. In a frank assessment of the prospects for the next round of negotiations due to take place in Brussels next week, he said he could not be optimistic in any way.

Fundamental issues, including access to fishing grounds, quotas, and stocks, still had to be resolved.

Mr Walker underlined his close and continuing consultation with the fishing industry and assured MPs that, if agreement was not reached on a fisheries policy, it would not be for want of trying.

Mr Bruce Millan, Labour's shadow Scottish Secretary, said that, unless agreement was reached by December 31, fishermen from all the Common Market countries would be entitled to fish right up to Britain's beaches.

Mr Norman Buchan, who opened the debate for Labour, called on the Prime Minister to show the same boldness in taking on the EEC over adequate safeguards for Britain's fishing industry as she had demonstrated over the Falklands.

He pressed the Government to re-affirm its commitment to a 12-mile exclusive limit around the coast and to dominant preference on the 12 to 50 mile zone.

Quietly ran the coal trains

Lack of directives from the union led to strike-breaking in some areas, David Goodhart reports

A STEADY stream of coal trains have been quietly shifting loads from pits in South Yorkshire and North Nottinghamshire to the line of power stations along the River Trent for the past ten days.

The miners who have been loading the strike-breaking trains have been clearly defying a National Union of Mineworkers conference decision.

Nobody seemed very worried about that yesterday at Manton Colliery in Mr Arthur Scargill's power base of South Yorkshire. "We didn't get any directives from the South Yorkshire area NUM until this morning," said one miner at Manton.

Now that the directives have gone out and the NUM officials are back from their Inverness conference, the trickle of coal trains—concentrated in the South Yorkshire/North Nottinghamshire area—will probably grind to a halt. But no one at Manton was hiding the fact that last week 10,000 tons of coal was moved from the pit to Cottam power station on the Trent.

That's about half the weekly output of the colliery—one of the larger ones in the S. Yorks area employing 1,400 miners.

Looking out from one of the pithead offices at Manton yesterday, I could see one of the 34-wagon "merry-go-round" locos piled high with 1,000 tons of coal. The automatic loading and dumping train was ready to be driven away by one of the NUR drivers from the Worksop depot.

"We'll probably only have about 3,000 tons moved this week," said one of the miners in the office. One of his colleagues added that Shire Oaks—another South Yorks pit—last week moved 19,000 tons into the 2,000-megawatt West Burton power station.

That is still only a tiny fraction of the area's normal weekly load of 500 trains and 500,000 tons, and the more militant pits around Doncaster and Barnsley are not moving a thing.

Apart from causing some embarrassment to Mr Jackie Ashmore—the NUM branch secretary at Manton—everyone accepts that this "rebellion" in the region's fringe has little significance. The miners who have been loading coal don't see themselves as deliberately strike-breaking—although some argue that if Aslef can't be bothered to mount pickets then they should keep loading the NUR drivers.

A British Rail official said that about 20 per cent of the normal coal trains were operating in Derbyshire and Nottinghamshire last week—but the Trentside power stations are not worried by a total shutdown on coal movement.

As Mr Derrick Wells, the manager of West Burton station, said: "We've got stocks here to last over four months." The Central Electricity Generating Board says the picture is the same countrywide, although there are plans to use more oil to conserve stocks.

Over half the coal stocks of 45m tonnes are still at pitheads and that could start to pose problems for the National Coal Board. The NCB estimates that over 500,000 tonnes of the 2.5m tonnes weekly output was moved last week—but as stocks mount the extra cost for the board could reach £6m a week.

About 700,000 tonnes a week is normally moved by road and ship and most of that should continue to get through, according to the Coal Board.

At Manton colliery—which relies exclusively on trains—a pitforeman said that with extra space for at least 750,000 tonnes they would have no problems. But at some other pits space is very tight and they will either face short-time working or high rents for extra storage room.

In Yorkshire—where they estimate they have an average of six to eight weeks space—and South Wales, the NCB is negotiating with local authorities for extra space.

Pit holidays over the next three weeks will provide some respite—with output falling by over half. But at Manton Colliery yesterday there was dark talk of some South Yorkshire pits having to "requisition" cricket pitches if the strike continues for long.

Restoring Parliament's grip on spending

Peter Riddell, our Political Editor, explains how MPs hope to bring back reality to the myth of parliamentary control over public expenditure.

A STEP towards reasserting Parliament's historic function of scrutinising and controlling public expenditure is likely to occur on Monday. The Commons will then almost certainly approve proposals to alter its procedures to allow MPs the opportunity to examine, and urge changes in, the detailed estimates of public expenditure.

The current, highly complicated, procedures merely maintain the myth of parliamentary control. Mr Joel Barnett, chairman of the Public Accounts Committee, has said: "The present position, whereby huge sums of money are granted to the Government virtually without debate, is quite intolerable in a democratically elected parliament."

The detailed scrutiny of particular estimates has been largely abandoned. There are theoretically 32 days available in each parliamentary session in which the Government's demand for Supply, that is expenditure, can be discussed. But three of these days are for private members and eight or nine of the rest are conventionally used to discuss, among other topics, the armed forces, Scottish affairs and the European Community.

The subjects for the remaining 20 or 21 days are almost invariably general policy issues—for example, fisheries yesterday, and regional and industrial policy on Wednesday. There are virtually no debates about particular estimates covering specific programmes.

This system has suited the Government in that it has run almost no risk of the details of its spending programmes being subject to close analysis and criticism, or being amended. Similarly, the main opposition party has regularly had a number of days when it can choose the debate.

Back benchers and financial specialists among MPs have, however, become increasingly dissatisfied. The widespread shortcomings of the present system were aired in a report last summer from a special procedure committee under the chairmanship of Mr Terence Higgins, the Tory MP for Worthing and a former Treasury Minister.

This report forms the heart of the proposals being put forward by Mr John Biffen, Leader of the Commons, next Monday following a debate earlier this year. But members of the committee have several detailed reservations.

The key proposal is that a number of days should be set aside each session for the detailed consideration of the main and supplementary estimates. On these days it will be possible for the reduction, but not the increase, in particular items to be proposed, debated and voted.

The intention is that the estimates will be referred to the dozen or so departmentally related select committees of the Commons. If they wish, these committees can recommend changes in particular estimates which, together with any suggestions from individual backbenchers, will be considered by either the liaison committee of select committee chairmen (as proposed by Mr Biffen) or by a special estimates business committee (as proposed by Mr Higgins and members of the procedure committee). This committee will, in turn, recommend which estimates are to be considered on the floor of the House.

The procedure committee report last year originally proposed eight days for this examination of estimates. The Government, always anxious about surrendering parliamentary time, has suggested three days. The Commons will have to decide on Monday between this and a compromise proposal of five days suggested by Mr Higgins and his colleagues.

Apart from a simplification of some other procedures, the other main proposal is that, in place of the present supply days, there should be 19 opposition days each session in which the Leader of the Opposition can pick the motion for debate.

That proposal has, however, become highly controversial in view of the breakaway by the Social Democrats. Instead of all but a dozen MPs coming from the two main parties, there are now 58 MPs from other parties. In the past some half-days have been granted, almost as a grace and favour, by the Leader of the Opposition to the Liberals or to the Nationalists. But this is not a formal requirement, which much annoys the SDP.

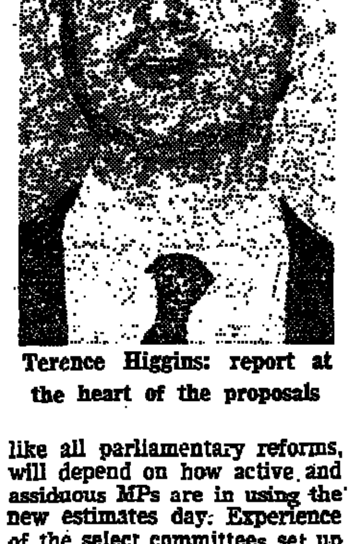
Consequently, Mr John Roper, the SDP whip and other members of smaller parties have tabled an amendment requiring the allocation of opposition days to take account of the relative size of parties.

These proposals are only a start. The procedure committee was re-formed last winter for the rest of this parliament and is now considering whether it will be possible to change Commons procedures to have a provisional "Green" Budget in the late autumn combining expenditure and taxation proposals.

The committee has also been looking at how long-term capital projects are approved, at the large amounts of expenditure which by-pass the Commons and at the possible control of Government borrowing by Parliament. The latter topic has become especially timely in view of the proposals in the Finance Bill to give the Treasury additional powers to borrow through the National Loans Fund. The current inquiry is unlikely to be completed until next spring.

The fate of these proposals, like all parliamentary reforms, will depend on how active and assiduous MPs are in using the new estimates day. Experience of the select committees set up three years ago has been mixed. Some sceptics wonder how many of these committees—apart probably from the Treasury and Civil Service Committee—will be prepared to divert time, and resources, from consideration of policy issues to the more laborious scrutiny of estimates.

But, thanks to the activity of a few prominent reformers, the opportunity has now been created for parliament to have, at least, some influence, if not control, over public expenditure.



Terence Higgins: report at the heart of the proposals

Right gains writ to re-run Civil Service union poll

BY PHILIP BASSETT, LABOUR CORRESPONDENT

RIGHT-WINGERS in the Civil and Public Services Association yesterday obtained a High Court writ seeking a re-run of the last elections for the union's national executive committee in which the left scored a spectacular landslide victory.

The writ, obtained by Mr Charlie Elliott and Mr Mike Butcher, two leading CPSA moderates, will be served this morning against the union itself, Mr Kevin Roddy, the union's president, who is a supporter of Labour's Militant Tendency, and Mr. Malcolm Rennard, another leading CPSA left-winger.

It is expected that the case will proceed to a hearing in the High Court on Tuesday morning, at which lawyers for Mr Elliott and Mr Butcher will seek an injunction overturning the elections and calling for a new round of balloting.

The legal moves follow mounting allegations by CPSA right-wingers of irregularities in the voting during the election, including a number of branches not receiving ballot papers.

The CPSA ordered an internal investigation into the allegations, to be carried out by Mr Stuart Crowhurst, the union's returning officer and chartered accountant.

However, Mr Crowhurst's report, delivered to the union this week, concluded that there was no marked evidence of any irregularities, other than those normally introduced by the particular system of voting used

Once the right-wingers found out that Mr. Crowhurst's report was broadly supporting the status quo, a move to the courts was probably inevitable.

The left in the disputed elections won the presidency of the union from a right-winger, and secured 23 seats on the national executive to three held by the right—a complete turnaround of the previous year's right-wing majority of 16—10.

Mr Elliott lost the presidency to Mr Roddy, by 21,515 votes to 23,210. Despite this vote, Mr Elliott failed to secure a place on the executive because of union rules governing the number of places for staff from individual Government departments.

The CPSA has a considerable history both of litigation between its deeply-divided political groupings, and of upheavals in its elections.

Theatre staff lose appeal against sacking

By Raymond Hughes, Law Courts Correspondent

THIRTY former employees of the National Theatre who were sacked in 1979 after going on an unofficial strike cannot claim for unfair dismissal, the Court of Appeal ruled yesterday.

Lord Denning said that the men, who had been told by their union, the National Association of Theatrical, Television and Kine Employees, to work normally, had caused the cancellation of eight performances and cost the theatre £20,000.

After being dismissed, the management offered to re-engage them—but on terms that if they offended again they might be sacked.

The men objected to that condition and rejected the offer. They complained to an industrial tribunal, which held that it had no jurisdiction to hear their claims of being unfairly dismissed.

Lord Denning said that the crucial question was whether the 30 had been offered re-engagement in the jobs they had held before. If so they could not claim for unfair dismissal.

BBC 1

6.40 am Open University (uhf only). 10.55 Golf: The Open from Royal Troon. 1.00 pm News After Noon. 1.27 Regional News for England (except London) London and SE: Financial Report. 1.30 Bod. 1.45 Golf. 4.18 Regional News for England (except London). 4.20 Play School. 4.45 Jigsaw. 5.10 Playhouse: "The Rose of Ice," by John Challen.

5.40 Evening News.

6.00 Regional News Magazine.

6.25 Nationwide.

6.50 To Free an Eagle: The monkey-eating eagle of the Philippines.

7.40 It Ain't Half Hot Mum.

8.10 It's A Knockout. Teams from Scunthorpe, Cleethorpes and Rotherham compete for a place in the Portuguese International Heat.

9.00 News.

9.25 Cagney and Lacey.

10.15 West Country Tales.

10.00 The Late Film: "Husbands," starring Ben Gazzara, Peter Falk and John Cassavetes.

TELEVISION

Tonight's Choice

The timing of Gardener's World (7.35 BBC 2) is distressingly close to the weekend, leaving the conscience pricking still on Saturday morning when the grass may be greener, but also considerably longer. This week, apart from vegetables and perennials, the programme takes a look at the wild flowers which we are all now trying to tame into suburban submission.

Friday is always much better on Radio (take the earphones into the garden perhaps?) anyway. Tonight's Any Questions? team is a bit on the weak side even if David Owen provides some good Man of the People sense. But Pick of the Week, International Assignment, Letter from America, Kaleidoscope, The World Tonight, Week Ending and the last episode of Mother and Son, the current Book at Bedtime, are all reasons for staying with Radio 4 throughout.

That is, of course, to ignore the First Night of the Proms (Radio 3, 7.30), but my dismissal of an evening of Berlioz is purely subjective.

Night owls would find it worthwhile switching to the Great Depression which can be seen here and there on ITV (11.30). A repeat perhaps, but a chilling reminder of the knife edge along which we all continue to walk.

ARTHUR SANDLES

BBC 2

6.40 am Open University.
10.30 Play School.
4.20 pm Golf: The Open from Royal Troon.
6.55 Six Fifty-Five Special.
7.30 News Summary.
7.35 Gardeners' World.
8.00 Birdspot.
8.10 Whatever Happened to Britain?
8.35 My Music.
9.00 Globe Theatre: "A Family."
10.20 Golf: highlights.
10.50 Newsnight.
11.35 John Field.
12.00 Open University.

LONDON

9.30 am Dick Tracy Cartoon. 9.45 The Master Builders. 10.10 Cologne Cathedral. 10.35 Sabotage, starring Sylvia Sidney, Oscar Homolka, Desmond Tester. 12.00 Wincey's Pets. 12.10 pm Once Upon A Time. 12.30 Sudden Change. 1.00 News with Peter Sissons, plus FT Index. 1.20 Thames News with Robin Houston. 1.30 About Britain. 2.00 Not For Women Only. 2.45 Friday Matinee: Felix Aylmer, Diane Cilento in "The Angel who Pawned her Harp." 4.15 Watch It! 4.15 Dr Snuggles. 4.20 Dance Crazy. 4.45 Freetime. 5.15 Film Fun.

5.45 News.

6.00 The 6 O'Clock Show.

7.00 Winner Takes All, presented by Jimmy Tarbuck.

7.30 Magnum.

8.30 Rep.

9.00 The Gentle Touch.

10.00 News.

10.30 On The Line.

11.30 The Great Depression . . . America: The Hoover Years, presented by Godfrey Hodgson.

†12.30 am Rawhide . . The Race, starring Clint Eastwood, Warren Oates.

1.30 Sit Up and Listen, with Lord Shinwell.

†Indicates programme in black and white

All IBA regions as London except at the following times:

ANGLIA

9.30 am Cartoon Time. 9.40 The Amazing Years of Cinema. 10.05 Tarzan. 10.55 Portrait of a Village. 11.20 Alphabet: The Story of Writing. 11.50 Wattoo, Wattoo. 1.20 pm Anglia News. 2.45 †Friday Film Matinee. 4.20 Razzmatazz. 6.00 About Anglia. 7.30 The Fall Guy. 9.00 On the Line. 10.30 Members Only. 11.00 Friday Late Film: "A Killing Affair." 12.45 am Many Tongues.

CENTRAL

9.55 am The Wild, Wild World of Animals. 10.20 Gardening Time. 10.45 Fangface. 11.10 History of the Grand Prix. 11.35 Contrasts. 1.20 pm Central News. 2.45 Summer Afternoon Comedy: "The Big Job." 4.20 Razzmatazz. 6.00 Central News. 7.30 The Fall Guy. 9.00 On the Line. 10.30 Soap. 11.00 Central News. 11.05 The Police Story Movie.

GRAMPIAN

9.30 am First Thing. 9.35 Sesame Street. 10.35 Call It Macaroni. 11.00 Thunderbirds. 11.55 The Adventures of Parsley. 1.20 pm North News. 2.45 Friday Matinee: "Life is a Circus." 4.20 Razzmatazz. 6.00 Summer at Six. 6.35 Diff'rent Strokes. 7.30 The Fall Guy. 9.00 On the Line. 10.30 Friday Late Night Film: "Triple Echo." 12.16 am North Headlines.

GRANADA

9.30 am An Outline History of Europe. 9.50 Stingray. 10.15 Last of the Wise. 10.35 The Beachcombers. 11.00 Sesame Street. 1.20 pm Granada Reports. 2.45 Friday Matinee: "Sabotage." 6.00 Jangles. 6.30 Granada Reports. 7.30 The Fall Guy. 9.00 On The Line. 10.30 Bizarre. 11.00 One To One. 11.30 The Savage West.

HTV

9.55 am Early Morning Picture show. 10.20 The New Accelerators. 10.45 Wonders of the Underwater World. 11.10 The Flying Kiwi. 11.35 Crazy World of Sport. 1.20 pm HTV News. 2.45 Friday Film Matinee "Good Morning Boys." 4.15 Warner Brothers Cartoon. 6.00 HTV News. 6.30 So What's Your Problem? 7.30 The Fall Guy. 9.00 On the Line. 10.28 HTV News. 10.30 Festival '82. 11.35 The Galway Way.

HTV Cymru/Wales — as HTV West except: 10.20 Palmerstown U.S.A.. 12.00 Bath am Stori? 4.15 Llynnoedd y Fforestydd. 6.00 Cystadleuaeth Fidio'r Dydd. 6.30 Video Competition. 10.30 Friday Night Thriller. 12.00 Video Sounds.

SCOTTISH

10.00 am Spread Your Wings. 10.25 Nova. 11.10 The Adventures of Black Beauty. 11.30 Johnny's Animal Operas. 1.20 pm Scottish News. 2.45 Friday Film Matinee: "Satan Met A Lady." 5.15 Private Benjamin. 6.00 Scotland Today. 6.30 Happy Days. 7.30 The Fall Guy. 9.00 On the Line. 10.30 Ways and Means. 11.00 Late Call. 11.05 Thriller "Mirror Of Deception."

TSW

9.25 am Sesame Street. 10.25 Comic Stories. 10.40 Clapperboard. 11.05 The Extraordinary People Show. 11.30 Fangface. 11.55 Look and See. 1.20 pm TSW News. 2.45 The Friday matinee: "The Secret Life of John Chapman." 4.12 Gus Honeybun's Magic Birthdays. 4.20 Razzmatazz. 6.00 Today South West. 6.30 What's Ahead. 7.30 Hart to Hart. 9.00 On the Line. 10.32 TSW Late News. 10.35 House Calls. 11.05 Continental Cinema: "Sink or Swim." 12.45 am Postscript.

TVS

9.35 am Our Incredible World. 10.00 Amazing Years of Cinema. 10.25 Comic Stories. 10.40 Clapperboard. 11.05 The Extraordinary People Show. 11.30 Fangface. 1.20 pm TVS News. 2.45 Friday Matinee: "The Big Job." 6.00 Coast to Coast. 6.30 Friday Sportshow. 7.30 The Fall Guy. 11.30 Down Under. 12.50 am Company.

TYNE TEES

9.20 am The Good Word. 9.25* North East News. 9.30** The World We Live In. 9.55 Hannah Barbera Classics. 10.45 Fashion Today. 11.00** Sesame Street. 1.20 pm North East News and Lookaround. 2.45 Friday Matinee—"Nearest and Dearest." 6.00* North East News. 6.02 A Real World. 6.30* Northern Life. 7.30 The Fall Guy. 9.00 On The Line. 10.30* North East News. 10.32 Friday Night Movie. 12.15 am Sam Sherry. 12.30 Hexham Male Voice Choir Sing.

YORKSHIRE

9.30 am Sesame Street. 10.30 Wild, Wild World of Animals. 10.55 It's A Musical World. 11.40 Canoe. 11.55 *The Undersea Adventures of Captain Nemo.* 1.20 pm Calendar. 2.45† Friday Film Matinee: "Satan Met A Lady." 4.10 Cartoon Time. 6.00 Calendar (Emley Moor and Belmont editions). 6.30 Calendar Summer Sport. 7.30 The Fall Guy. 11.30 Speedway. 12.15 am That's Hollywood.

RADIO

RADIO 1

(S) Stereo broadcast (when broadcast on vhf)

5.00 am As Radio 2. 7.00 Steve Wright. 9.00 Simon Bates. 11.00 Radio One Roadshow from Northern Ireland. 12.30 pm Newsbeat. 12.45 Dave Lee Travis. 2.00 Paul Burnett. 5.30 Newsbeat. 5.45 Roundtable. 7.00 Andy Peebles. 10.00 The Friday Rock Show (S).

RADIO 2

5.00 am Ray Moore (S). 7.30 Terry Wogan (S). 10.00 Jimmy Young (S). 12.00 Gloria Hunniford (S). 2.00 pm Ed Stewart (S). 4.00 David Hamilton (S). 5.45 News; Sport. 6.00 John Dunn (S). 8.03 Friday Night Is Music Night (S). 10.00 The Grumbleweeds. 10.30 Alistair Cooke. 11.00 Brian Matthew with Round Midnight (stereo from midnight). 1.00 am Night Owls (S). 2.00 You And The Night And The Music (S).

RADIO 3

6.55 am Weather. 7.00 News. 7.05 Morning Concert (S). 8.00 News. 8.05 Morning Concert (continued). 9.00 News. 9.05 This Week's Composer (S). 10.00 BBC Northern Symphony Orchestra (S). 11.15 Musicians of the *Royal Exchange (S). 12.05 BBC Welsh* Symphony Orchestra Concert, Part 1: Bach, Poulenc (S). 1.00 News. 1.05 Concert, Part 2: Ives, Haydn (S). 1.45 Jacques Leguerney. 2.05 Haydn Piano Sonatas (S). 3.00 A Cricket on a Hearth (S). 4.00 Choral Evensong (S). 4.55 News. 5.00 Mainly for Pleasure (S). 6.30 Another World (S). 7.00 Voices from the Proms. 7.30 The First Night of the Proms. Berlioz: The Trojans (sung in French) Acts 1 and 2, The Capture of Troy (S). 9.05 You Will Hear Thunder (S). 10.00 Music for Two Pianos (S). 10.30 Words. 10.35 Dvorak (S). 11.15 News.

RADIO 4

6.00 am News Briefing. 6.10 Farming Today. 6.30 Today. 8.33 Yesterday in Parliament. 9.00 News. 9.05 Desert Island Discs (S). 9.45 A Sideways Look At . . . 10.00 News. 10.02 Groundswell. 10.30 Daily Service. 10.45 Morning Story. 11.00 News. 11.03 God Give Good Life (S). 11.48 Natural Selection. 12.00 News. 12.02 pm You and Yours. 12.27 My Music (S). 1.00 The World at One. 1.40 The Archers. 2.00 News. 2.02 Woman's Hour. 3.00 News. 3.02 Afternoon Theatre. 4.00 News. 4.02 Showbiz Naturalists. 4.10 Cinema Up To Now. 4.40 Story Time. 5.00 PM 6.00 News, including Financial Report. 6.30 Going Places. 7.00 News. 7.05 The Archers. 7.20 Pick of the Week (S). 8.10 International Assignment. 8.30 Any Questions? 9.15 Letter from America. 9.30 Kaleidoscope. 10.00 The World Tonight. 10.35 Week Ending (S). 11.00 A Book at Bedtime. 11.15 The Financial World Tonight 11.30 Today in Parliament. 11.45 Glyn Worsnip. 12.00 News.

FT COMMERCIAL LAW REPORTS

Ship's arrest for foreign judgment debt

DESPINA GK

Queen's Bench Division: Mr Justice Sheen: July 9 1982

WHERE JUDGMENT in rem is obtained against shipowners in a foreign admiralty court, and the ship is released from arrest upon their putting up security, the English Admiralty Court may later order the ship's arrest in respect of moneys still due under the judgment, if the ship comes within the jurisdiction and its ownership has not changed.

* * *

Mr Justice Sheen so held when giving his reasons for ordering the arrest of the ship, Despina GK, as security for outstanding sums due from her owners, Despinola Shipping Incorporated, in respect of a judgment obtained by cargo-owners, New Hampshire, in the Swedish Admiralty Court.

*

HIS LORDSHIP said that Despina GK was a dry cargo ship. She was chartered for a voyage from Antwerp to Mogadishu, on which she carried 710 tons of skimmed milk powder.

In November 1975 the cargo-owners learned that their cargo had been dumped at sea. They wished to claim damages from the shipowners. They found Despina GK in a Swedish port. They commenced an action *in rem* in the Admiralty Court of Stockholm, and arrested Despina GK on May 15 1976. Her owners obtained her freedom by putting up security.

The district court gave judgment for the cargo-owners, and awarded a maritime lien on Despina GK. The appeal court amended that decision to the extent that the sums due should not be levied on any of the shipowners' property other than Despina GK. The final judgment, in the Swedish Supreme Court, upheld the appeal court and ordered that the shipowners pay the sums claimed. They paid in part.

In June 1982 Despina GK was still under the same ownership. She entered a port within the jurisdiction of the English Admiralty Court. The cargo-owners issued a writ claiming the sums outstanding on the judgment of the Swedish Admiralty Court. They applied for a warrant of arrest. The Admiralty Registrar refused to issue a warrant.

The cargo-owners appealed from that refusal. His Lordship ordered that a warrant of arrest be issued, and Despina GK was arrested at Immingham on June 24. He now gave his reasons. The shipowners did not apply to have the warrant set aside, and he heard argument only by Mr Gruder, on behalf of the cargo-owners.

*

Section 20(1) of the Supreme Court Act 1981 provided that the *Admiralty jurisdiction of the* High Court should be "any other Admiralty jurisdiction which it had immediately before the commencement of the Act."

That took one back to section 1 of the Administration of Justice Act 1956, which provided that the admiralty jurisdiction should be "any other jurisdiction which was vested in the High Court of Admiralty immediately before the date of the commencement of the Supreme Court of Judicature Act 1873 . . ."

Mr Gruder relied on that residual jurisdiction, and in particular on the decision of Sir Robert Phillimore in the *City of Mecca (1879) 5 PD 28.* In that case the question was whether the Admiralty Court could and ought to enforce the judgment of a foreign admiralty court by a proceeding *in rem.*

Sir Robert Phillimore said at page 30: "First, . . . whatever authority upon this subject was incident to the Court of Admiralty before the Judicature Act belongs to this court now. Secondly, this court has always exercised a jurisdiction founded upon international comity with respect to the execution of the sentences of foreign courts . . . The duty of the Admiralty Court in England to enforce the decree of a foreign admiralty court has been steadily recognised for a great number of years . . . It is the duty of one admiralty court . . . to enforce the decree of another . . .".

Mr Gruder relied on a comment made by Mr D. R. Thomas in his book Maritime Liens on page 330. He said: "A beneficiary of a foreign judgment *in rem* is therefore in the same position as a maritime [lienor] for he may pursue the *res* into whomsoever's hands it may pass."

That statement was not correct. There was nothing in *the judgment of Sir Robert Phillimore* to support it. If he had taken the view that the plaintiffs as beneficiaries of a foreign judgment had a maritime lien over City of *Mecca*, he would have said so.

The decision of Sir Robert Phillimore was reversed in the Court of Appeal where different facts were proved: but nothing was said which undermined the principle on which he decided the case, or his statement as to the duty of one Admiralty court to enforce the decree of another.

*

The main argument against the issuing of a warrant for the arrest of Despina GK in England was that when she was arrested in Sweden her owners put up security and thereby, in effect, purchased her freedom from arrest.

In the *Kalamazoo (1851) 15 Jur 885* Dr Lushington said: "The effect of taking bail is to release the ship in the action altogether." That was followed in the *Point Breeze [1928] P 135* where Mr Justice Bateson said: "The only right to arrest in a damage case is that which the party claiming has got by a maritime lien, and a maritime lien follows the ship to other people's hands. The position of people who have ships that have been released on bail—if I were to allow this arrest to stand—might be very unfortunate."

There was, of course, a distinction between claims which gave rise to a maritime lien and which might, therefore, be enforced against the ship notwithstanding a change of ownership, and those claims which might only be enforced by an action *in rem* if the person who would be liable *in personam* was still owner of the ship when the writ was issued.

Likewise, there was the further distinction between an action *in rem* against the ship, and execution of a judgment *obtained in such an action.* In the *Gemma [1899] P 285* the Court of Appeal held that the owners of a foreign vessel had, by appearing in an action *in rem* rendered themselves personally liable. Accordingly, if the amount of bail given for the release of the ship was insufficient to satisfy the judgment, the balance outstanding could be enforced against any of the defendant's goods and chattels, including the released vessel if she came within the jurisdiction.

A judgment creditor who obtained a final judgment against a ship-owner by proceeding *in rem* in a foreign admiralty court, could bring an action *in rem* in the English Admiralty Court if that was necessary to complete the execution of the judgment, provided that ship was the property of the judgment debtor at the time of her arrest.

For the cargo-owners: Jeffrey Gruder (Ince and Co.).

By Rachel Davies

Barrister

RACING

BY DOMINIC WIGAN

MICHAEL STOUTE resisted a tempting opportunity for Henry's Secret at Yarmouth on Wednesday, preferring to wait with the Solinus filly for today's St Catherine's Stakes at Newbury. I believe the tip will prove worth taking.

A good-looking daughter of Katie Cecil, Henry's Secret has looked to be a high-class filly in the making on both her appearances to date.

The fortuitous but highly creditable conqueror of Bright Crocus at Windsor on her debut, where Piggott was caught napping on the runner-up, Henry's Secret went on to land Beverley's Hilary Needler trophy with a minimum of fuss. There, Stoute's £33,000 yearling purchase drew well clear of Tysandi to beat her market rival by five lengths.

If, as I anticipate, Henry's Secret proves even more effective over today's stiff six furlongs, she should be good enough to account for Octavia Girl, who looked backward when springing a 33-to-1 surprise at Ascot.

Half an hour before the St Catherine's Stakes, there is another good fillies' race; for the Ridgeway Stakes has attracted a small but select field which *includes She's Incredible* and Durun. Durun, a particularly tough and game daughter of Duboff, did well to pick up races at Warwick and Haydock in May, but it is hard to see her coping with She's Incredible at a difference of only 12 lb.

Some Spare, which came fourth in the Wood Ditton Stakes, will probably land the Aldbourne Maiden Stakes earlier in the afternoon provided he can be kept on a straight course.

NEWBURY

2.00—Some Spare***
3.00—She's Incredible**
3.30—Henry's Secret*
4.00—Dawn Ballet

COMPANY NOTICES

SANDVIK

Sandvikens Jernverks Aktiebolag
US$15,000,000.00 9% Bonds 1986
10th Redemption due 1st August 1982

Bank of America NT & SA London hereby give notice that in accordance with the terms and conditions of the above loan, the redemption of $1,500,000.00 Bonds due the 1st August 1982 has been carried out in the following manner. US$1,262,000 principal amount bonds have been purchased in the open market by the Company, the remaining US$238,000.00 principal amount bonds have been drawn at par on 14th July 1982 in the presence of a Notary Public pursuant to the terms and conditions of the above loan.
Bonds drawn are listed below and may be presented to Bank of America NT & SA, 25 Cannon Street, London EC4P 4HN or the other paying agents named on the bonds.
Bonds surrendered for redemption should have all unmatured coupons appurtenant thereto, coupons due 1st August 1982 should be detached and collected in the usual manner.
Bonds will be received on any business day and must be left three clear working days for examination.

Bonds of $1,000 each

15	48	93	128	162	196	240	275	312	345
378	426	486	542	577	610	644	702	746	810
842	887	918	953	992	1034	1070	1681	1714	1747
1791	1827	1859	1895	1932	1967	2001	2036	2067	2279
2337	2378	2411	2448	2500	2525	2582	2617	3001	3071
3106	3161	3201	3240	3304	3424	3784	3875	4033	4085
4288	4327	4387	4432	4864	4959	5031	5136	5187	5827
5867	5951	6009	6082	6115	6171	6207	6242	6298	6334
6375	6466	6525	6559	6603	6661	6695	6634	6674	6813
6846	6920	6980	7036	7088	7127	7170	7209	7245	7279
7379	7404	7481	7575	7614	7762	7811	7843	7875	7928
7978	8036	8067	8123	8192	8382	8416	8469	8504	8536
8570	8604	8639	8681	9082	9448	9571	9621	9677	9712
9744	9802	9843	9938	9987	10032	10104	10201	10454	10663
10931	11021	11055	11304	11341	11387	11419	11465	11500	11532
11566	11602	11635	11669	11702	11737	11770	11807	11839	11888
11928	11984	12026	12074	12107	12141	12175	12207	12243	12277
12312	12344	12382	12417	12451	12483	12518	12522	12594	12629
12663	12695	12727	12759	12793	12826	12862	12894	12929	12962
12995	13029	13063	13092	13127	13159	13193	13224	13260	13293
13328	13361	13410	13442	13486	13520	13555	13590	13624	13669
13702	13739	13772	13806	13841	13874	13909	13941	13991	14027
14060	14094	14130	14163	14221	14266	14300	14332	14639	14671
14737	14772	14804	14838	14871	14905	14940	14977		

GREATERMANS STORES LIMITED

NOTICE TO SHAREHOLDERS
DIVIDENDS ON PREFERENCE SHARES

NOTICE IS HEREBY GIVEN that the Board of Directors has declared the following dividends payable on 31st August, 1982, to 6%, 5%, Second 5% and Third 5% Preference Shareholders respectively, registered in the books of the Company, at the close of business on Friday 30th July, 1982:

A—6% CUMULATIVE PREFERENCE SHARES—DIVIDEND No. 93
A dividend at the rate of 6% per annum for the six months ending 31st August, 1982—equivalent to 6 cents per share.

B—5% CUMULATIVE PREFERENCE SHARES—DIVIDEND No. 79
A dividend at the rate of 5% per annum for the six months ending 31st August, 1982—equivalent to 5 cents per share.

C—SECOND 5% CUMULATIVE PREFERENCE SHARES—DIVIDEND No. 73
A dividend at the rate of 5% per annum for the six months ending 31st August, 1982—equivalent to 5 cents per share.

D—THIRD 5% CUMULATIVE PREFERENCE SHARES—DIVIDEND NO. 71
A dividend at the rate of 5% per annum for the six months ending 31st August, 1982—equivalent to 5 cents per share.

The dividends are declared in South African currency and dividends payable from the London Office will be paid in United Kingdom currency calculated at the rate of exchange ruling between Rand and Sterling on 19th August, 1982.

Dividend cheques despatched from the London Office to persons resident in Great Britain or Northern Ireland will be subject to a deduction of United Kingdom Income Tax at rates to be arrived at after allowing for relief (if any) in respect of South African Taxes.

The Company will, where applicable, deduct the Non-Resident Shareholders' Tax of 15% from dividends payable.

For the purpose of paying the above dividends the Share Registers, in respect of the above Preference Shares, will be closed from 31st July to 13th August, 1982, both days inclusive.

Dividend cheques in payment will be posted on or after 31st August, 1982.

By Order of the Board,
B. C. CRAGG, Secretary.

Registered Office:
220 Commissioner Street,
Johannesburg, 2001.
South African Transfer Secretaries:
Central Registrars Limited,
154 Market Street,
Johannesburg, 2001
(P.O. Box 4844,
Johannesburg, 2000).
London Transfer Secretaries:
Granby Registration Services,
Bourne House,
34, Beckenham Road,
Beckenham,
Kent, BR3 4TU,
United Kingdom.

NIPPON CHEMICAL CONDENSER CO., LTD. (CDRs)

The undersigned announces that as from 26th July 1982 at Kas-Associatie N.V., Spuistraat 172, Amsterdam and at Banque Internationale à Luxembourg S.A., Luxembourg, div.cp.no. 7 (accompanied by an "Affidavit") of the CDRs Nippon Chemical Condenser Co., Ltd.; will be payable with US$ 39,32 net (div. per record-date 31.3.1982; gross Yen 12,- p.sh.) after deduction of 15% Japanese tax = Yen 1.800,- = US$ 6,94 per CDR. Without an Affidavit 20% Japanese tax (= Yen 2.400,- = US$ 9,25 per CDR) will be deducted.

After 31.10.82 the dividend will only be paid under deduction of 20% Jap.tax with US$ 37,01 per CDR in accordance with the Japanese tax regulations.

AMSTERDAM DEPOSITARY COMPANY N.V.

Amsterdam, 9th July 1982

UNION DE BANQUES ARABES ET FRANCAISES U.B.A.F.

LOAN OF US $65,000,000
FLOATING RATES 1980/1990

Bondholders are hereby informed that the applicable rate for the sixth period of interest has been fixed at 16⅛%.

Coupon No. 6 will be payable as from January, 1983 at a price of US $84.33 which is a 16⅛% interest worked out on a basis of 184/360th covering the period from July 12, 1982 to January 11, 1983 inclusive.

The Fiscal Agent
CREDIT LYONNAIS—
LUXEMBOURG

J. ROTHSCHILD INVESTMENT HOLDINGS B.V.

(Incorporated with limited liability in the Netherlands)
£12,000,000
14¼% GUARANTEED BONDS DUE 1990

Bondholders are hereby informed that the August 15th 1982 redemption instalment of £800,000 has now been fully satisfied by purchases in the open market. The balance remaining in circulation is currently £10,400,000.

THE CHASE MANHATTAN BANK N.A.
London
Principal Paying Agent

July 16, 1982

KINGDOM OF DENMARK

7½% 1972/1987 FF 100,000,000 Bonds

Notice is hereby given to Bondholders of the above Loan that the amount redeemable on September 1, 1982, i.e. FF 6,000,000, was bought in the market.

Amount outstanding: FF 58,000,000.

Luxembourg, July 15, 1982

The Fiscal Agent
KREDIETBANK
S.A. LUXEMBOURGEOISE

THE PACIFIC FUND S.A.

Societe Anonyme
14, Rue Aldringen, Luxembourg

DIVIDEND ANNOUNCEMENT

The shareholders are hereby informed that the Annual General Meeting of Shareholders of July 12th, 1982 has approved the payment of a dividend of US$0.015 per share to shares subscribed and in circulation on July 12th, 1982 payable immediately against presentation of Coupon No. 1.

The shareholders can cash the dividend at the following bank:
Banque Generale du Luxembourg, S.A.
27, Avenue Monterey,
Luxembourg.

THE BOARD OF DIRECTORS

THE ROYAL BANK OF SCOTLAND PLC

(The Royal Bank of Scotland Limited)

US $30,000,000 FLOATING RATE CAPITAL NOTES 1983
US $75,000,000 FLOATING RATE CAPITAL NOTES DUE 1986 TO 1994

NOTICE IS HEREBY GIVEN to Noteholders that the above Bank's office as a Paying Agent in respect of the captioned issues is being changed from 62 Lombard Street, London EC3P 3DE to 24 Lombard Street, London EC3V 9BA with effect from May 17, 1982.

The Principal Paying Agent
KREDIETBANK
S.A. Luxembourgeoise

May 17, 1982.

LEGAL NOTICES

No. 003282 of 1982
In the HIGH COURT OF JUSTICE
Chancery Division
IN THE MATTER OF
ROTAPRINT plc
AND IN THE MATTER OF
THE COMPANIES ACT 1948

NOTICE IS HEREBY GIVEN that a Petition was on the 2nd day of July 1982 presented to her Majesty's High Court of Justice for the confirmation of the reduction of the capital of the above-named Company from £3,033,816 to £2,274,441.

AND NOTICE IS FURTHER GIVEN that the said Petition is directed to be heard before the Honourable Mr. Justice Nourse at the Royal Courts of Justice, Strand, London, WC2 on Monday 26th July, 1982.

Any Creditor or Shareholder of the said Company desiring to oppose the making of an Order for the confirmation of the said reduction of capital should appear at the time of hearing in person or by Counsel for that purpose.

A copy of the said Petition will be furnished to any such person requiring *the same by the undermentioned Solicitors* on Payment of the regulated charge.

Dated this 14th day of July 1982.
CLIFFORD-TURNER,
Blackfriars House,
19, New Bridge Street,
London EC4V 6BY.
Solicitors for the said Company.

IN THE MATTER OF
YEOMAN TRANSPORT (BEARSTED) LIMITED
AND IN THE MATTER OF
THE COMPANIES ACT 1948

NOTICE IS HEREBY GIVEN that the creditors of the above-named Company, which is being voluntarily wound up, are required, on or before the 13th day of August, 1982 to send in their full Christian and surnames, their addresses and descriptions, full particulars of their debts or claims, and the names and addresses of their Solicitors (if any), to the undersigned

PATRICK WALTER JOHN HARTIGAN
of 1 Wardrobe Place,
Carter Lane,
London EC4V 5AJ

the Liquidator of the said Company, and, if so required by notice in writing from the said Liquidator, are, personally or by their Solicitors, to come in and prove their debts or claims at such time and place as shall be specified in such notice, or in default thereof they will be excluded from the benefit of any distribution made before such debts are proved.

P. W. L. HARTIGAN, Liquidator.

PERSONAL

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MANAGEMENT

EDITED BY CHRISTOPHER LORENZ

How Deutsche Bank found a safe path through a global minefield

West Germany's largest bank has avoided the troubles that are afflicting many of its competitors. Stewart Fleming reports

WERE it not for the eccentricities of German accounting, the closest domestic rivals of West Germany's largest commercial bank, Deutsche Bank, would have suffered even greater embarrassment when they published their 1981 results.

For while some of its main competitors were for the second consecutive year reporting another plunge in profits (or no profits at all), lower dividends (or no dividends at all) and further management and organisational shake-ups, Deutsche Bank disclosed that not only had it weathered the financial storms in the German markets again, but its return on its DM 192bn of assets was the best in its history, better even than in 1974.

Just how well or badly German banks have performed is difficult to judge because of the extraordinary lengths they go to to disguise the extent of their profits — or losses. Comparisons, too, are difficult because of different accounting conventions and varying methods of consolidating domestic and international subsidiaries.

In the case of Deutsche Bank however, between 1979 and 1981 the bank reported that its operating profits had doubled to DM 1.5bn ($600m). Pre-tax operating profits provide one reasonably firm base in the shifting sands of German bank accounting since they are struck before most of the conjuring tricks which the accountants perform with securities valuations, provisions and the banks' trading on their own account in foreign exchange, gold and stocks and bonds.

The accompanying table, prepared by IBCA Banking Analysis of London gives some indication of the relative profitability of the big three German banks at the operating level in the past two years. The banks themselves would no doubt quarrel with the individual figures, but the overall picture they present would appear to be a fair one bearing in mind that own account trading profits and losses are not included.

The fact that Deutsche Bank emerges from the comparison so well is of more than local interest. The bank is the ninth largest in the world and its success in the past two testing years for the West German banking industry will not have escaped the notice of such international competitors such as Citicorp, Bank of America or Barclays.

GERMAN BANKS' NET OPERATING RESULTS 1981
(Consolidated figures DM m)

	DEUTSCHE			DRESDNER			COMMERZBANK		
Income:	1981	1980	% change	1981	1980	% change	1981	1980	% change
Net interest revenue	3,897	3,184	+22.4	1,889	1,642	+15.0	1,141	967	+18.0
Net commission revenue	996	891	+11.8	702	612	+14.7	451	413	+ 9.2
Dividend revenue	301	271	+11.1	147	173	−15.0	87	95	− 8.4
	5,194	4,346	+19.5	2,738	2,427	+12.8	1,679	1,475	+13.8
Expenditure:									
Salaries	(2,389)	(2,238)	+ 6.7	(1,659)	(1,605)	+ 3.4	(1,135)	(1,088)	+ 4.3
Other operating expenses and depreciation	(1,188)	(1,050)	+13.1	(810)	(790)	+ 2.5	(430)	(423)	+ 1.4
	(3,577)	(3,288)	+ 8.8	(2,469)	(2,395)	+ 3.1	(1,565)	(1,511)	+ 3.5
Net pre-tax operating income	1,617	1,058	+52.8	269	32	+740.6	114	−36	na
Group assets (DM bn)	192.4	174.6	+10.0	*170.0	159.0	+ 7.0	101.3	100.0	+ 1.3

*Business volume

NB Operating income excludes profits and/or losses from banks' own trading in gold, securities and foreign exchange.
Source: IBCA Banking Analysis Ltd.

In the 1970s such competitors watched with fascination, even awe, the bold, sometimes hectic, expansion of the German banks on the international scene. Latterly as banks such as Dresdner Bank, Commerzbank and Wesetdeutsche Landesbank have trimmed back the rate of expansion of their international assets and in some cases of their overall balance sheets because of profit problems and the prospect of stiffer legal capital adequacy requirements, the Federal Republic's banks have become more cautious competitors.

Deutsche has not had to lurch from one extreme to the other, however. At a time when domestic lending has been depressed, it is still pursuing the same measured international growth as before, albeit with shifts in priorities. It has been cautious in recent years in making low margin balance of payments financing loans and is putting more emphasis on local currency lending through the branch network, which has been expanded, especially in the past five years.

Dr Wilfried Guth, joint chief executive of the bank, says: "It is the style of this bank to make gradual moves."

He stresses that the bank "has been very profit-orientated" without of course drawing invidious comparisons with the asset-orientated expansion of many of the bank's domestic rivals, adding only that profit orientation "will determine our business policy. I do not care for size but I do care for growth, to attract good people, and maintain motivation and profitability."

Volatility

Quality of management has become an increasingly decisive factor in the performance of international banks in recent years. As the pace of change and the volatility of international markets has increased the importance of sound judgment has become more and more critical, as has the more mundane but equally vital task of ensuring that shifts in policy are communicated down the organisation and acted upon quickly.

In both areas there has been evidence that Deutsche, for example in its judgment of interest rate trends or in East Bloc lending, has not only been shrewder than many of its rivals but that its far flung empire has been more responsive to shifts in policy at the top.

More effective management systems are, however, only part of the explanation for the bank's success in riding the stormy financial markets of the past two years in Germany. It also has the good fortune of being the domestic market leader in retail and commercial banking.

As a Swiss banker remarked recently, Deutsche Bank is in the happy position of being able to quote terms and if the customer does not like them to show him the door.

This domestic base has been built up over decades and has given today's management an enviable inheritance both in terms of market position and hard cash. As a universal bank (like its many competitors) the business encompasses not just retail and commercial banking but also issuing and dealing in securities and extensive and valuable holdings in industrial companies.

Deutsche for example holds over 25 per cent of the shares of Daimler-Benz—worth around DB 2bn. IBCA Analysis recently calculated that the bank's eight major industrial holdings had a market value of almost DM 3bn against a book value of 1.2bn —part of the bank's hidden reserves.

These close ties with industry, the issuing house activities in both domestic and international securities markets and the advisory services for both commercial and private customers are all factors which have helped the bank to build up a very substantial annual fee income. Stable commission income is especially attractive to banks in these days of pressing equity capital requirements and volatile interest and exchange rates, and Deutsche commission earnings of DM 966m have grown steadily from DM 400m a decade ago.

Its retail banking business, too, has been a vital element in its recent performance. With 1,300 retail branches in West Germany and 5m customers, Deutsche is a powerful competitor for the German savings and co-operative banks. Indeed it has been known to boast that it is the biggest "savings bank" in Germany. In last year's balance sheet it had DM 20bn of savings deposits which were costing between 5 and 7 per cent in a year when lending charges ranged between 12 and 17 per cent.

Employing cheap funds probably is as important as having them, however. It is the failure to do this which accounts for the short fall in the profits of many of Deutsche's major rivals in the past two years.

The bank recognised earlier than they did (although somewhat later than the big U.S. international banks) both the dangers and the opportunities presented by international liability management. And it did not commit itself as easily to long-term fixed interest lending.

The Polish loan crisis has also provided some evidence that Deutsche's judgment of lending risks was better than that of many of its competitors. Like all German banks Deutsche lent heavily to Poland, but substantially less than its biggest competitors.

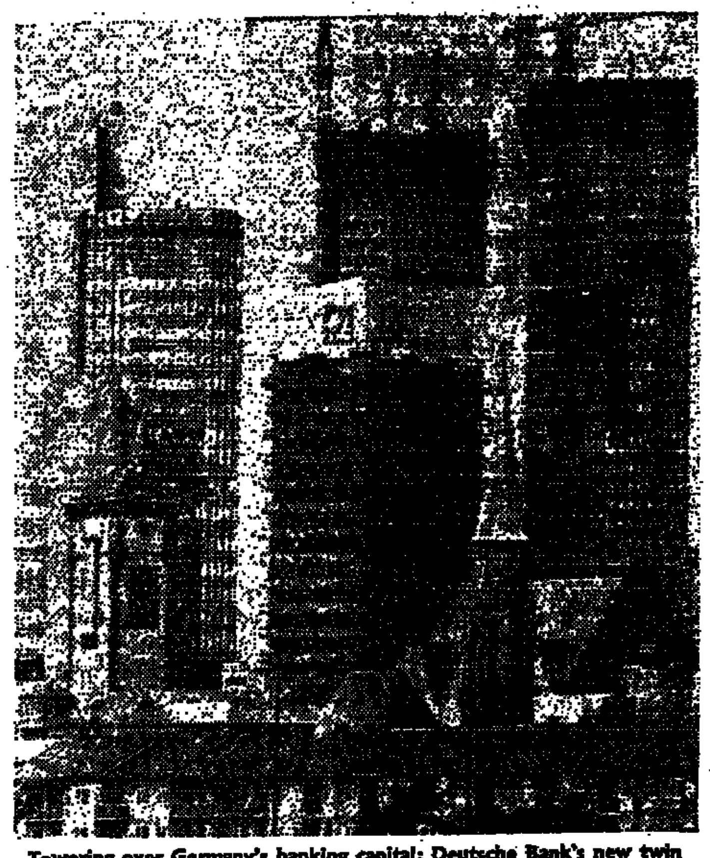
Other banks have, partly because of inadequate profitability, made provisions of only around 10 to 20 per cent against the Polish exposure. But Deutsche Bank is generally believed to have put aside provisions covering most, if not all of the risk, as well as a multitude of other lending risks which are facing it and its domestic competitors, ranging from the AEG crisis to the national bankruptcy wave.

That at least is the conclusion which has been drawn from the remarkable risk provision policy the bank has followed in the past two years.

Modest

The figures provide only a general guide because once again the bank's accountants are able to juggle with the figures before disclosing the provisions figure. But in a presentation in New York in May Dr Guth remarked that in the three years between 1979 and 1981 the bank put aside net loan loss provisions of $728m adding "the gross figure is still higher."

The bank's presentation in New York in May was its first such venture. While it may have owed something to the bad press which German banks have been getting in the U.S., there have been signs too that "gradually" Deutsche Bank is stepping up its commitments in the U.S., a policy which would fit in with both its international standing and its increasing preoccupation with the corporate market—after all the densest concentration of major international companies is in the U.S.



Towering over Germany's banking capital: Deutsche Bank's new twin skyscrapers in Frankfurt dwarfing its old headquarters (centre), the Hessische Landesbank (left), and the city's old town hall. Dr Wilfried Guth (left), joint chief executive, insists that the bank "cares not for size but for growth"

Even though Deutsche has a major world-wide business with around 40 per cent of its earnings and assets coming from international activities, in relation to its size—and its competitive position vis a vis the British banks in particular—Deutsche's U.S. business is relatively modest. Its branch in New York has assets of $2.5bn. It has, in some observers' eyes, an anomalous 20 per cent stake in the European American Bank (a European consortium bank), it owns a securities house, Atlantic Capital Corporation, and a finance company with assets of DM 214m.

Since the New York branch was opened in 1979 the bank has been steadily expanding its U.S. operations. Although it has made no major U.S. acquisitions, it has, as Dr Alfred Herrhausen, the board member responsible for the U.S., disclosed, been "offered opportunities to buy into existing American commercial banks and, incidentally, existing finance companies."

Laws governing both American banking and securities business, and Deutsche's own important industrial holdings in Germany all combine to make the acquisition route into the U.S. a legal minefield for a German bank, especially at a time when "de-regulation" is promising to alter the U.S. legal landscape.

Cultural incongruities must also play a role, although the Hongkong and Shanghai Bank may be demonstrating ways around that. Buffalo in upper New York State and the Orient could scarcely be described as natural partners, but it was the Buffalo-based Marine Midland banks of which Hongkong and Shanghai bought control in 1980.

So far as Deutsche is concerned the outside observer can only remark that with a securities house on Wall Street, a branch, a finance house and a stake in a U.S. bank, the big German banking institution has given itself the opportunity to gain experience in all the major wholesale financial markets.

TECHNOLOGY

EDITED BY ALAN CANE

DAVID FISHLOCK'S final profile of UK engineers: Cyril Hilsum of the Royal Signals and Radar Establishment, Malvern

Cheerful attempt to marry man and his machine

CYRIL HILSUM, 57, with a shock of white hair that the elderly Einstein might well have envied, is trying to marry man and machine more closely. His speciality is the interface called the electronic display, the "window" through which man can see how his machine is behaving.

He holds the rank of deputy director but is one of a small, highly privileged cadre of senior defence scientists who largely are shielded from executive responsibility in order to keep them creative. He has more than 30 inventions to his name on behalf of the Defence Ministry.

Hilsum runs a group of about 20 scientists, spending about £750,000 a year, working in one of the most advanced technologies of his establishment. But just one of the developments from his group—novel chemicals for liquid crystal displays —earns Britain annual royalties estimated at £500,000, mostly from Far East makers of watches, watch-pens and electronic games.

Hilsum gratefully acknowledges that a slight misunderstanding on the part of a politician, Mr John Stonehouse, then a technology minister, gave him his big chance to specialise in man-machine relations.

The watchword of the (then) Ministry of Technology was "civil fallout" from defence research.

Stonehouse seized upon an assertion by Hilsum's director that the royalties Britain was paying RCA for its Shadowmask cathode ray tube patents—basis of colour TV and displays—amounted to more than the cost of Concorde.

The director's point was that politicians should not get Concorde's costs out of proportion. But Stonehouse asked the director to develop a flat-screen display to supplant the Shadowmask. So Hilsum was invited to draw up the research programme.

Hilsum brings to the problems of man-machine relations an astonishing skill in human communications, permeated by a puckish and irreverent sense of fun. His career, from leaving University College, London, at the end of the Second World War, has been spent in defence research. He admits cheerfully, that it has not been without hiccups.

It began with an intelligence task, scanning reports — "about 1 ft per day"—and interrogating German prisoners on the subject of infra-red night vision. In 1946 he drafted an appraisal which led a senior Navy scientist to say he was wasting his talent at HQ and should be doing research.

His debut with the Admiralty Research Laboratory included passing the Civil Service exam "with the minimum mark." Then, at 26, he found himself running a team of a dozen, developing army night-sight equipment. But he "failed abysmally" attempts to promote him because he was quite inexperienced in administration.

As part of the Admiralty's first research effort on semiconductors in the early-1950s, however, Hilsum soon specialised in semiconducting compounds, notably gallium arsenide, a "beast" of a material, not least of the problems of which was the case with which it exploded.

Modestly, he recounts taking responsibility for gallium arsenide in 1960, "at a time when they'd solved most of the problems, so I got a lot of credit I didn't deserve." Following the invention of the first semiconductor laser in the U.S. in 1962, Hilsum's group was the first to demonstrate it in Europe.

But the "invention" for which he is pleased to take credit is the industrial consortium—"probably the idea that's lived longest." He persuaded four fiercely competing British electronics companies—GEC, Marconi, Plessey and STL—to collaborate in a long-range research project using Ministry of Defence funds. Mullard joined later.

The first target was an integrated circuit based on gallium arsenide at a time, 1961, when silicon IC's had only just been invented. The venture was "extremely unofficial" — the company managements did not want to know.

The Admiralty laboratory at Baldock, where Hilsum worked, provided materials technology. Each company tackled a clearly defined part of the project.

The secret of successful collaboration is that "everybody's got to feel he is giving a bit more than he takes." Each partner must believe it is slightly unjust for him—"but only slightly." Hilsum, as the "unbiased neutral" in the venture, occupied a pivotal position as chairman of the consortium.

The consortium collapsed when Hilsum moved to Malvern in 1963, as an individual-merit SPSO, free to undertake his own line of research. But the ministry got it started again—this time officially. It put Britain ahead of the world in some lines of semiconductor research, he claims.

Displays seized his imagination about 1970 when it became clear that the remarkable strides Malvern was making in miniaturising radar systems were not being matched in displays. A flat-screen was urgently needed—it should be more compact and more rugged than the cathode ray tube.

At the last moment Hilsum made an intuitive switch in the proposed research programme, putting emphasis on liquid-crystal displays (LCDs) instead of ferro-ceramic displays. He never had cause to regret that "purely instinctive" action for the ferro-ceramic display is long-forgotten.

The clue to successful LCDs was better materials than industry had been exploiting. At Hilsum's suggestion, a collaboration was struck between Malvern and Dr George Gray of Hull University. It has been one of the most rewarding the Ministry of Defence ever funded, earning overseas royalties for Britain of about £500,000 a year.

Phil Thompson

Professor Cyril Hilsum: puckish sense of fun

"There are very few things in electronics that have just a civil or a military application," Hilsum believes. "An agile mind can turn them either way." His new displays are no exception. His funding comes equally from the Defence and Industry ministries.

On the military side, he hopes to see his displays introduced into a range of new Army systems including Ptarmigan, for battlefield communications, and Rapier.

But technology which could serve both interests include ideas for redesigning an aircraft cockpit, reducing and even eliminating the maze of dials by using displays on which the pilot calls up only the information he needs at a given moment.

For Cyril Hilsum, such an application would be a "sensible linking of electronics with the display," vastly simplifying the cockpit. Flight trials are now being made to learn whether they will improve the marriage of man and the flying machine.

Brewers turn to biotechnology to improve breeding characteristics of yeasts

How to reduce the cost of a better pint of beer

BREWERS are looking at the possibilities of biotechnology to speed up and cut the cost of beer-making.

The Brewing Research Foundation is trying to develop new forms of yeast to improve the fermenting process. At its headquarters in Redhill, Surrey, genetic engineers have been experimenting with yeast for three years.

They have used techniques such as genetic manipulation and rare breeding—mating yeasts of different varieties—to obtain new types.

Among the first yeasts which could become available to brewing companies on a commercial basis is a yeast for use in making low carbohydrate beer. This can produce a lower calorie beer by degrading the dextrin found in the barley malt.

Other new yeasts include one which speeds up fermentation which could cut storage costs, another yeast is being developed which has the ability to attack and destroy contaminants in the brewing wort. This is a problem often encountered in so-called "real ales."

The scientists at the foundation also believe that there will be a demand for a yeast which produces more fat compounds. This makes the beer head stick to the side of the glass

The foundation has also tried to improve the beginning of the brewing process where the barley is converted into malt by germinating the seeds in water.

At Redhill, scientists have found that it is quicker to convert the starch into sugar by two stages rather than the traditional methods which use a relatively long single stage.

Artificial enzymes have also been developed which can cut the whole process from 10 to only four or five days.

Before the yeast is added the sugars are boiled. In this form it is called the wort. The wort is boiled to destroy bacteria and any proteins which may make the final product hazy.

This part of the process consumes as much as 70 per cent of total energy used and the foundation believes that by studying the chemical reactions which take place during boiling they can shorten the process with consequent energy and cost savings.

ELAINE WI[illegible]

Converters

Ferranti package

FERRANTI ELECTRONICS has produced a 10 bit monolithic analogue to digital converter in a moulded package. The company claims that this is the first device of this type to be produced in this way in Europe.

Ferranti says that manufacturing constraints have forced 10-bit converters to be made in expensive ceramic packages. The new moulded packages cost less than half its ceramic equivalent. More information on 061 624 0515.

Travel

Computer booking

THOMSON HOLIDAYS, the UK's biggest travel company, this week started live trials of its planned computer booking system for travel agents.

At present, 66 travel agents around the country are connected to Thomson's TOPs system which links videotex television sets to the company's main booking computer over the telephone network. The company plans to operate a full national service in the autumn.

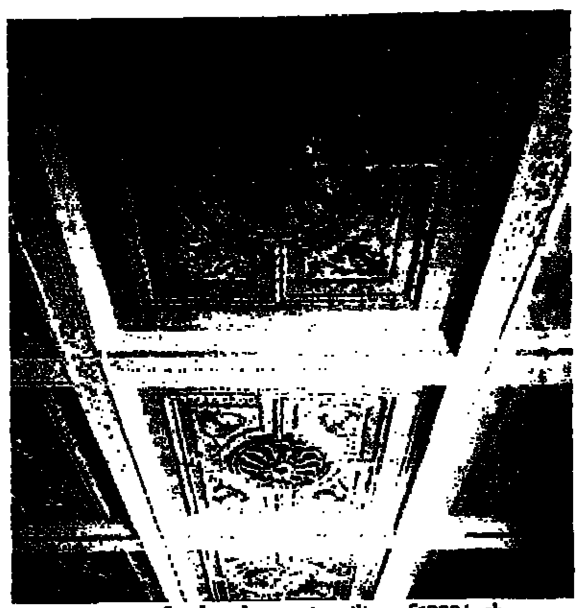
Advertising

Software

APPARENTLY even the glamorous world of advertising will not escape the influence of the computer, because Philips Business Systems has introduced a special software package for advertising agencies.

Its system is aimed at medium-sized companies to increase control over invoicing, and advertising costs, as well as management reports and client files. More information on 0206 [illegible]

RESTORING A SCOTTISH BANK, WE HAD TO WATCH THE OVERHEADS.



Burmantoft's glazed ceramic ceiling of 1900 in the main Banking Hall.

The Banking Hall of the new London Chief Office of the Bank of Scotland has a truly magnificent listed ceiling.

In glazed ceramic, and in 'art nouveau' style, it's the work of the famous Victorian designers and manufacturers, Burmantoft.

It was something Wates had to watch very carefully indeed when we started to restore and develop the site, behind a listed Victorian facade.

There was, indeed, plenty in the contract that might have put the ceiling in jeopardy.

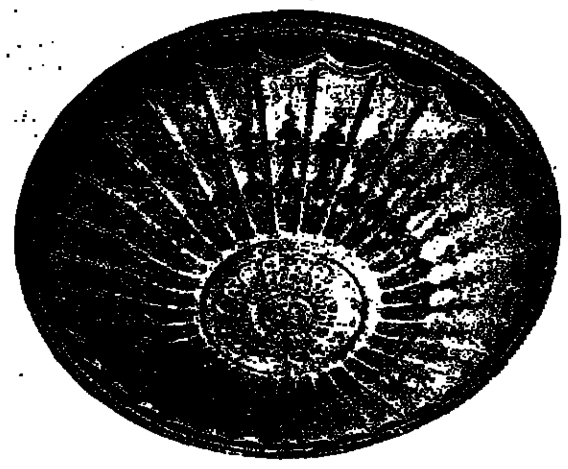
Removing the existing roof, to extend the building by another floor, then building a new mansard in keeping with the Palladian style of architecture.

Replacing a lightwell to the rear of the building in order to 'stitch in' a new steel frame for seven new floors.

Re-building the bank's basement in order to install two new two-storey vaults.

In addition, a 7-ton generator and other heavy plant had to be hoisted to the roof. All in the face of incredible access and egress problems.

Our only means of getting to the rear of the site was through a narrow courtyard, Threadneedle Court, alongside the Bank. (Threadneedle Street has a double yellow line, which meant no off-loading during normal hours.)



The beautiful circular ceiling in the West Pavilion Reception Office.

Thousands of cubic metres of material excavated from the basement had to be removed at night-time through this busy courtyard.

In the event, we protected the ceilings by covering them with nylon netting stretched between steel cables.

And protected them from rain above by waterproofing the third floor with a special membrane (allowing us to demolish the old slate roof).

Down in the Banking Hall, we carefully restored marble columns, gold leaf decoration, and the magnificent mahogany vestibule.

In the floors above, we installed modern air-conditioned offices for the Bank's Directors and staff, with three lifts, a modern staff dining area and a prestigious Directors' Boardroom.

And all the electronic wizardry that a modern banking headquarters needs.

We handed over Phase One of the building last November, on the agreed date.

In that time, we had more than doubled the original floor area of the Bank.

And provided the Bank with a perfect blend of 19th century elegance, and 20th century office efficiency.

The Chief Architect of the Bank said he was impressed not only that 'Wates cared' but that 'Wates people cared' from boardroom level to the site operatives.

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Whether it be a Bank, or a superstore, or a local authority that signs the cheque. **wates build with care**

THE PROPERTY MARKET BY MICHAEL CASSELL

Overseas enthusiasm for U.S. real estate still plentiful

THE United States real estate market may have temporarily lost its characteristic self-confidence but the present bout of nerves does not appear to have weakened the resolve of those outsiders intent upon snatching a share of the action.

As talk of inevitably rising yields and rapidly faltering faith in the UK property market gains more ground around the City, so a series of events and deals has kept the spotlight trained on the U.S. The general approach seems to be that any present difficulties for American real estate are of little longer-term consequence and should be regarded as a golden opportunity rather than cause for fright among the faint-hearted.

That, certainly, was this week's message from quaintly named Saracreek Holding, a Dutch company investing in high quality, completed, income-producing office buildings and shopping centres in the United States.

Monday will see the start of dealings in Saracreek shares on the London Stock Exchange—they are already quoted in Amsterdam and Paris—and the company hopes to attract institutional and private investors interested in establishing, or stepping up, holdings in U.S. commercial property.

Saracreek has a portfolio of eleven properties with a March 1982 valuation of £125.2m. A "shell" company reorganised in 1977 by Schroder Wagg, the Amro Bank and Banque Privée de Gestion Financière, the number of shares in circulation has since risen from 10,000 to over 4.6m. Earnings per share stood at $2.85 in 1981, with net asset value per share reaching $34.46. Current share price stands at around $25.74, giving a market capitalisation of about $119m.

Mr Charlie Grossman of Schroder Real Estate Corporation, the company's property advisers, told a City unveiling ceremony that while those nasty rumours about an ailing U.S. market could hardly be denied, Saracreek's performance (surprise, surprise) has left the rest of the field standing.

According to Mr Grossman, values of new property in the U.S. had fallen by anything between 10 and 20 per cent over the past year, but Saracreek's experience had been very different. "We buy reversionary property, usually five to 15 years old, which tends to be undervalued in the States but which offers the greatest potential uplift."

As a result, a market valuation carried out last November was fully confirmed by the recent valuation prepared in advance of the new listing.

Even so, Saracreek and Schroder do admit to having "backed away" from the market in recent months and, while they bought 10 properties in 1980 and five in 1981, they have yet to sign a deal in 1982. There is, however, over $20m patiently waiting for the right opportunity and this could be accounted for by the end of the year.

The reason for the London listing is put down to all the usual factors, such as prestige and wider exposure but it does appear as though Saracreek has sometimes been less than enamoured with the enthusiasm which has greeted some of its European money-raising efforts and that the decision to introduce itself in London was not an easy one.

Columbia

FOR those less likely to get enthusiastic about the possibility of some excitement—namely tax-exempt pension funds—time is running out to take up the first offer of 550,000 units from Columbia Property Trust, a new unit trust with a board of management drawn from a range of blue-chip City institutions as well as U.S. property experts.

The Trust, advised by Healey and Baker, Guinness Peat Properties, Hill Samuel Property Management and Travelers Asset Management of New York, intends to acquire a diversified and geographically spread portfolio and will consider joint investments with developers and other investors. It accepts that others before it have made mistakes but it reckons it has learned a lot from watching their errors. Closing date at Hill Samuel's is July 29.

Baring

THERE ARE, of course, other ways of investing in the American property market and Baring Brothers, the UK merchant bank, has taken up one of the options available.

Last month it bought 33⅓ per cent of international real estate consultants Landauer International, taking out Shearson/American Express and two other German and Swiss holders. The transaction probably valued the whole of the Landauer equity at close to its high margin gross revenues of just under $12m (nearly £7m).

The deal leaves Landauer with three other shareholders: its own senior management, UK estate agents Hillier Parker and J. Bourdais, the French commercial property services company.

Roger Cockhill, the Hillier Parker partner responsible for property investment and international activities, describes Landauer as an "unusual vehicle." Most U.S. real estate is dealt in by brokers whereas Landauer is a consultant working on a fee basis. Last year, it was involved in the $400m sale of the Ford Motor building in New York and this year it was at the centre of the $500m General Motors building option deal.

"Landauer seems to have a unique position in real estate advisory work," says M. J. Rivett Carnac, a managing director of Baring Brothers. "It is determined not to be a mass market broker, and to keep its top-of-the-market niche."

Barings have an office in New York, where their main business is domestic pension fund management which, by its specialised nature, covers portions of the funds of 30 or 40 major corporations. It has over $1½bn under management but none of that is in real estate.

Rivett Carnac sees Barings' motivation in this deal as first, buying a good investment, secondly, getting expertise on the ground and thirdly, improved management capability. For some time, it has seen real estate as a gap in its investment management expertise—and this includes the UK.

Landauer, clearly, expects to profit from the misfortune of others. The sales Cockhill sees coming up will involve itself advising on disposals from the portfolios of major developers—some of them Canadians under pressure from short term borrowings at high rates—on a basis which is expected to be geographically widespread but with preponderance of office buildings and a number of shopping malls.

Barings emphasise that Landauer is a very long term investment while their new partners, Hillier Parker attack the problem of UK investment in U.S. real estate in more general terms: "not an ideal moment to float a lot of new funds, but a good moment for expertise," is how Roger Cockhill puts it.

"The market is far more difficult than anyone expected 12 months ago," he says. He does not see a crisis of 1974 proportions threatening the market, but expects plenty of opportunities to buy.

Savills

THERE IS considerable excitement at the Grosvenor Hill offices of Savills, with the opening of its Washington DC operation little more than two weeks away. Savills emphasised this week that the U.S. involvement will be highly specialised, entailing the acquisition, management and perhaps valuation of agricultural land, very hard to buy in the UK but which Savills have been studying closely in the U.S. since the lifting of exchange controls.

After a year or more of falling U.S. land prices and low commodity prices, Savills believe that the time is now right for land purchase. Leicester Le Sueur, leaving shortly for Washington to be Savill's senior partner in the U.S., was less concerned with domestic market sensitivity than with the sterling/dollar relationship.

Heron

AS FOR others favouring the totally direct approach, look no further than Gerald Ronson's Heron International, the holding company for the British-based Heron Corporation. Mr Ronson must be feeling pretty pleased about this week's land deal, concluded in Tucson, Arizona.

Heron in partnership with two Tucson based developers, Don Diamond and Frank Aries has paid $75m (£43.5m) for 12,500 acres of development land in and around Tucson. The 25 separate parcels of land formed part of the estate of the late Howard Hughes, the U.S. millionaire recluse who died in 1976.

Heron is already well on the way to recouping the purchase price and has presold 1,500 acres (just over a fifth of the land) for $40m. Heron says other deals are in the pipeline and expects to have fully recovered the purchase price by the end of this year when Heron could be left with 5,000 to 6,000 acres which will either be developed by Heron or sold for development.

The deal appears reminiscent of the real estate coup pulled off by European Ferries in Denver, Colorado. The object appears to be to break up the land holding for resale to recoup the original purchase price and then redevelop the remaining parcels of land in partnership and preferably using other people's finance.

Unhappily, not everyone appears sufficiently sure of themselves to talk about what they are doing. Debenham Tewson and Chinnocks were this week happy enough to say they were involved in the purchase, for $20m, of 489 Fifth Avenue, New York, on behalf of "a major UK institution," but much less enthusiastic about identifying either the purchaser or vendor.

The 140,000 sq ft office tower, which represents the first major U.S. property acquisition for the mysterious buyer, is let to several tenants and the majority of leases come up for renewal in the next few years. No doubt tongues will loosen after any substantial reversionary increases.

THE Post Office Staff Superannuation Fund and Mitsui Real Estate of Japan, the largest Japanese real estate developer in terms of revenues, have agreed in principle to negotiate an exchange of property interests in London and Tokyo.

The two may also study further long term joint investments in other parts of the world, according to Ralph Quartano at Possfund. Mr Quartano accepts that everyone will want to know what London properties are being considered, but says he is not yet ready to give such information.

The arrangement represents a highly unusual attempt for an overseas investor to penetrate the Japanese property market and the first step is likely to involve a swap of respective participations in one London and one Tokyo property. The two partners have known each other for some time and joined forces for a scheme in Paris.

●

DIXONS Photographic property division was the purchaser for £1.8m of Nash House, the London freehold premises of troubled Sotheby Parke Bernet. The deal was apparently concluded during one of the many lulls in play at Wimbledon and will be followed by a Dixons planning application to redevelop the site, on the corner of Maddox Street and St George Street, to provide about 10,000 sq ft of office floorspace. Talks with a tenant are already underway.

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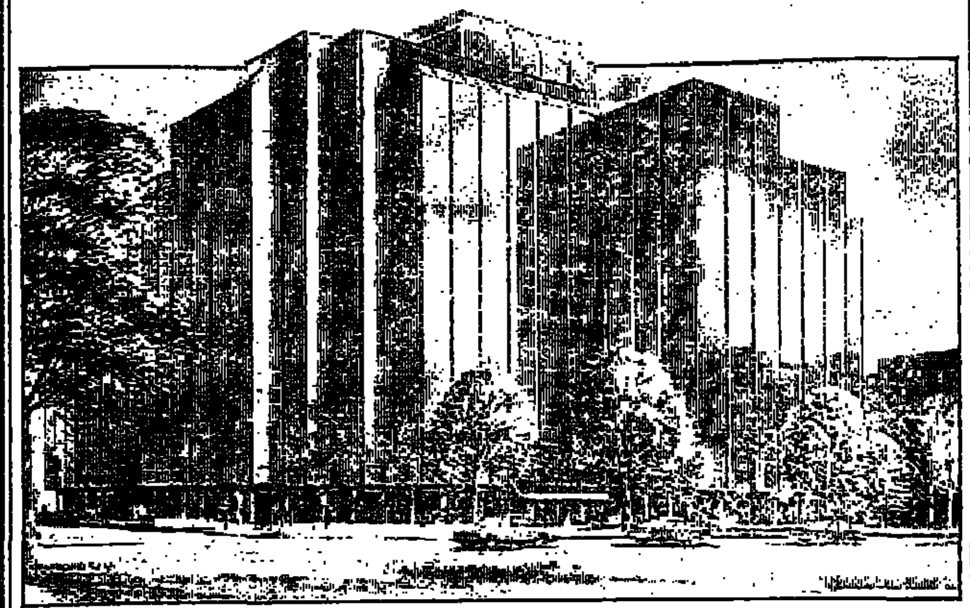

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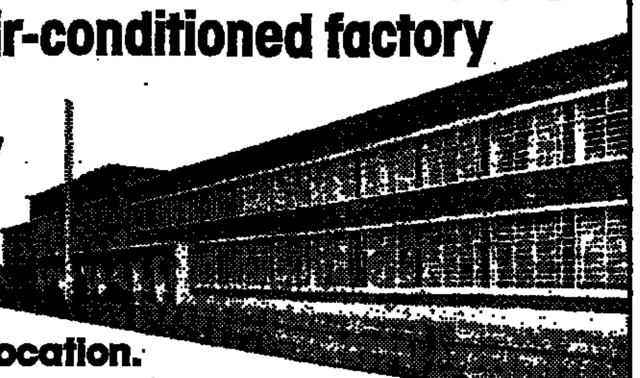

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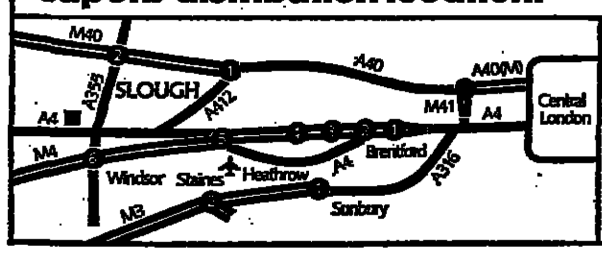

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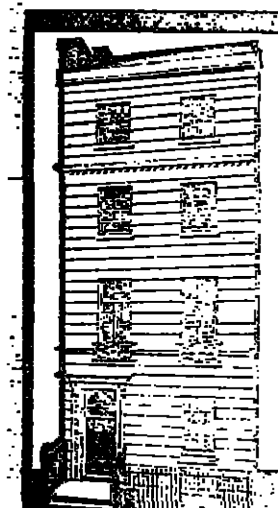

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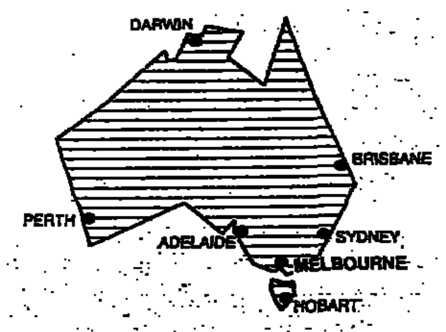

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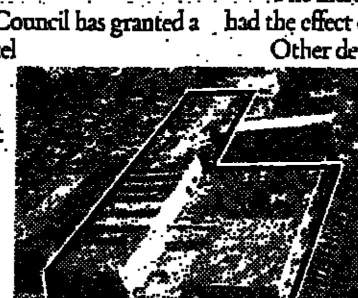

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THE ARTS

Cinema

Nigel Andrews

The buck stops here

Rollover (AA) Warner West End
Pink Floyd The Wall (AA) Empire
Firefox (AA) Warner West End
Ritwik Ghatak National Film Theatre

Rollover, directed by Alan J. Pakula, begins by looking distinctly peculiar. Can that truly be Jane Fonda, yesterday's bedenimmed radical, dripping in jewels and clenching her enamelled cheekbones as an ex-film star turned chemicals company tycoon? And can that be Kris Kristofferson, deep-throated son of the backwoods, as a suit-and-tied bankers and top Wall Street troubleshooter?

It is, they are, and miraculous-to-say nearly all the curious gambles—of casting and subject—in this high-finance thriller pay off. This is easily the best of the four movies-with-a-message that Jane Fonda has delivered under the banner of her own production company. (The others were *Coming Home*, *The China Syndrome* and *Nine To Five*.) *Rollover* purports to shake a stern finger at the shaky structure of world finance: the vast skyscrapers of Western wealth built on the shifting sandstone of the petrodollar. What, the film urges us to inquire, would happen if Arabs by the oasis-ful suddenly withdraw their oil-earned billions from American banks rather than letting the money "roll over" into the next, and then the next, fixed-interest period?

Director Pakula, who wrapped *Klute* and *The Parallax View* in majestic sharows of conspiracy unease, has created a New York of wonderful dark opulence and doomed bustle: as widow Fonda, stepping into the size 12 boots of her murdered chemicals-boss husband, wonders should-she-shouldn't-she stake her majority sharehold as security for a company-saving loan of $500m from a wealthy but prolixly wheeler-dealing Sheikh.

Kris Kristofferson will help Ms Fonda make her deal, will suss out the suspect Sheikh, and will also find out why Fonda's spouse was murdered: darkly clobbered in his office one night by a stocking-masked hitperson as he pored over an Arab transfer account.

Kristofferson will also, of course, fall in love with Ms F., growling out *dolce farniente* over candlelit dinners, twinkling his cavern eyes, and sweeping her off her Gucci-clad heels in her palatial town-house, where sumptuous fur rugs lap at the feet of costly Frank Stella paintings.

Preposterousness limns these scenes of high romance in high-expense settings. But steepling and vertiginous flamboyance is part of the purpose of this parable about money and its meaning. Paper-currency economies, say Pakula and his scriptwriter David Shaber, are ornate houses-of-cards whose pinnacles have long lost sight of the ground beneath them and whose fragility risks ever-imminent collapse. The film weaves a deft and brilliant visual to-and-fro between the eyried abstraction of sky-scraper-top offices—all lunging, glassy verticals in grey, black, silver—and ground or sea-level scenes where a figurative earthly warmth creeps in: to remind us of the real roots, in sea-trade and hunting, from which the tree of American high-finance grew. A gala dinner-dance in the Natural History Museum, surrounded by glassed-in walruses and polar bears stuffed-rampant; prints of old Manhattan, its wharfs and sailing ships, on Wall Street walls.

The story rattles resonantly along down momentous main-lines, along Byzantine detours and through tenebrous tunnels to a neatly apocalyptic ending, where Armageddon is not a smoking battlefield of slain bodies but a sepulchral, deserted Stock Exchange where shrouded consoles and video-computers sit in Doomsday immobility.

For a film starring and co-financed by the redoubtable Miss Fonda, the surprise of *Rollover* is that it isn't a loud-and-radical red, but a subtle and nuanced pink: a handsome, compellingly ambiguous film, poised between censure of the system and anxiety at the consequences of its too-sudden overthrow.

*

When rock-concert albums are made into movies, they usually result in terminally lop-sided sense-experiences. The eardrums are left in a state of blitzed satiety and exhaustion, while the eyes are underwhelmed and undernourished. Not so with *Pink Floyd The Wall*. Director Alan Parker has soundtracked the Floyd's song-cycle in seat-shaking stereo, but for once images of matching bravura assault the screen.

This non-narrative film collage is Stream of Consciousness movie-style. Unlike his *Shoot The Moon*, where staccato pyrotechnics were shelved for a *legato* domestic drama, *The Wall* leaps forth from the Parker who made *Midnight Express* and *Fame*: the ex-commercials *wunderkind* who blithely pasted you in the eye with bold, brassy and skimpily interconnected images.

The film is a knock-on whatnextery of visions—soldiers in battle, a punk-fascist rock concert, cartoon serpents and birds and bombers (by Gerald Scarfe), blood, turmoil, hypodermics, Oedipal mothers—that like Pink Floyd's own music flies fearfully close to adolescent *sturm und drang* but somehow keeps its poetic wings airborne and vigorous.

Here on hand is Bob (Boomtown Rats) Geldof, with a face like a morose rubber-tyre, as "Pink": the film's war-baby hero whose growing-up and ideological pilgrim's-progress—through pacifism and hippyism and militarism and punk—parallels the postwar life-story of Britain. Here is a battalion of white-masked schoolchildren whom Parker marches through eerie tunnels of dazzling light, or processes along a giant conveyor-belt into a giant mincer. Here is a frightening *trompe l'oeil* transition between live-action and animation, when a life-size human shadow on a wall rears up into a shape huge, devouring and serpentine. Here and elsewhere, this is one of those rare films where the hand-holds of a firm plotline are never missed and movie-making virtuosity is its own reward.

*

In *Firefox* Clint Eastwood dons a moustache and spectacles and wreathes himself in shadows in order to infiltrate the Soviet Union and steal "the most devastating killing machine ever built." This is "Firefox": a supersonic fighter-bomber plane which is operated by the pilot's thought waves, flies at radar-defying velocity, and puts all other advanced 20th century military hardware in the shade. "There is only one problem," he is briefed by earnest and helpful Russian fifth-columnist Nigel Hawthorne; "You have to think in Russian."

Undeterred, and certainly unhurried (the film lasts a full, feeling 2¼ hours), our strong-silent hero moves through the land engaging with a relay-force of British actors caught in the grip of free-floating foreign accents, and finally takes the much fussed-over vehicle to the skies. The finale is a fine kaleidoscope of aerial pursuits, sky-high gymnastics and stuttering, flame-throwing warfare. But it arrives painfully late in a film that is elsewhere more like a forced yomp across soggy and underlit B-movie terrain. Alex Lasker and Wendell Wellman wrote the script, from Craig Thomas's novel. Eastwood himself directed.

*

Opening at the National Film Theatre next week is a season of films by the gifted Indian director Ritwik Ghatak. This teller of gaunt tales staged with a high-volt power was a contemporary of Satyajit Ray and an Expressionist Tweedledum to Ray's serenely neo-realist Tweedledee. The NFT season includes his two best films—*The Mechanical Man* and *The Hidden Star*—and is a timely tribute to a true and striking original.

'We Don't Need No Education' scene from Pink Flloyd The Wall

Der Rosenkavalier/Glyndebourne

David Murray

Class-consciousness is gone from this *Rosenkavalier*: Erte's designs impose a democracy of vulgar chic. Between the Marschallin's powder-puff bedroom and morning salon (two scenes here, not one), newly rich Faninal's *Stadtpalais* and the ill of ill repute there are no differences of history or estate, but merely of tint and trim. Newcomers will miss a dimension of the opera, then; yet in the circumstances everybody does wonders with it — and not by taking the easy farcical option, but by making it serious bourgeois comedy. Which suits the new Glyndebourne very well.

In John Cox's production (rehearsed by Robert Carsen) three of the 1980 principals have returned to their original roles. The original Sophie, Krisztina Laki, is ill, but admirably replaced by Deborah Rees. If a brighter touch of silver in the voice might be wished, she is secure and true, shaping her long phrases exquisitely. She suggests tremulous gaucheness, hollow-eyed with anxious excitement: very touching, and still strong enough to rise cleanly to her great moments. Felicity Lott remains the Octavian, a golden androgynous vision, not to be resisted.

Rachel Yakar's Marschallin is less a great lady (which would hardly suit the setting) than a well-to-do hostess who has a useful line in hauteur for settling the Act 3 imbroglio. Plenty of warmth and sensibility, a hint of weary matronhood: her monologues are not on a Shakespearean scale, but gently, sadly reflective. In the light conversational singing that *Der Rosenkavalier* raises to a special art, Miss Yakar excels all her colleagues—though she leads the Trio in fine, impassioned style. Donald Gramm's Ochs is neither backwoods aristocrat nor comic oaf, but an interesting eccentric: a touch of Parolles, even a tinge of Don John. He doesn't answer to the gross zest of his orchestral music, but his singing is silky and immensely refined. Denied a proper final rout by Mr Cox, he carries the part on sheer intelligence.

To Ronald Crichton's praise of Simon Rattle's conducting, I shall just add that I do not remember the awkward third act so brilliantly—even ruthlessly—kept going, to its enormous benefit. (Rattle actually erases the traditional chorale-pauses in the line of the final duet, boldly and successfully.) Derek Hammond-Stroud's Faninal has acquired benevolence but lost some edge: as the pair of intriguers, the excellent John Fryatt and Nucci Condò look under-directed. Andrew Gallacher makes a confident impression as the Police Inspector, and Nicholas Buxton made me notice for the first time the First Lackey's few lines in Act 2, sung beautifully in character.

Medici Plus/Fishmonger's Hall

Dominic Gill

The City of London Festival visited Fishmongers' Hall on Wednesday: an imposing Victorian edifice stranded hard by London Bridge on the north bank of the Thames. There is just one substantial compensation for the fact that the main hall, packed with people on a warm summer's evening, quickly becomes as hot and humid as a Turkish bath—for it also has one of the clearest and warmest chamber-music acoustics of any hall in London.

The Fishmongers should open it to recitals in the winter. Puce-faced and slippery-stringed, the Medici Quartet were slow to cool at the start of their programme last night, with a performance of Haydn's D major op.76 no. 5 that was decent, unflamboyant, and definitely wilting. It was not really until the andante of the G major K387, the first of Mozart's "Haydn" quartets, freshened by a momentarily opened window, that the players could truly come to grips with their music; and there, against all the odds, their finale was a delight, quick and deftly sprung.

They were joined after the interval by Peter Frankl (replacing a still indisposed Clifford Curzon) for the piano quintet of Dvorak. By now sufficiently acclimatised, the five delivered an admirably energetic performance of the tail-chasing first movement, and with great charm the much more inventive second.

Somewhere in the swelter, I lost track of the scherzo; but the finale, wound up with infectious brio, commanded attention by its very aptness—the sort of jolly, inconsequentially tuneful stuff that Dvorak could spin off asleep or awake, on the hottest summer night.

Maybe This Time/New End

Michael Coveney

The author of this new comedy, Alan Symons, is a former estate agent bent on exposing the alleged scandal of what goes on in the marriage bureaux. Which smacks to me a little of the pot and the kettle. But my resistance to the show is not a moral one. Indeed, the best of the play is the sharp focus it lends to personal relationships foundering on the rocks of professional expediency.

The trouble is that the preparation of the dramatic dilemma, such as it is, is painfully over-extended and not very interesting. Martin Sutherland's neat design places us in an Esher clearing house for unmatched lonely hearts. Sara and Lucy rattle on for over half-an-hour before a rather unconvincing client breaks through the door. Each lady has her own problems which, to a certain extent, are subsumed in the daily business of other peoples' affairs.

This interminable chit chat, uncoloured by any effective attempt at characterisation, kills the evening stone dead and there is nothing to be done by either Judy Carne or Lynette Davies, as the partners in crime, to alleviate the tedium.

The show exerts a grip only with the intrusion of Tim Hardy as Lucy's husband, when very recognisable themes of job demands versus domestic duty are airily despatched in Mr Hardy's bottled anger and ironically deflected speech patterns.

But all falls to pieces once more when Miss Carne's ex-husband turns up with some pathetic mumbo jumbo that implicates both Bernard Levin and Socrates in a despairing farewell of "*tempus fugit* as usual." The director of a trying and over-long evening is Peter Stevenson.

Makarova in Onegin/Munich

Clement Crisp

The two poles between which the action of John Cranko's *Onegin* swings are the "letter" duets that end the first and third acts. One is a mirror image of the other — the first celebrating Tatyana's effusion of romantic feeling for Onegin; the second her rejection, as a mature woman, of Onegin's no less romantic avowal of a love which he acknowledges after ten years of wandering. As part of the Munich Opera Festival the resident ballet company has just presented two performances of *Onegin* with Makarova as Tatyana and Peter Breuer as Onegin. In the second, on Tuesday night, Makarova's art was never more astounding in communicative beauty or lyric warmth than in these two *pas de deux*. Part of the secret of this portrait — tumultuously received, with five curtain calls after the first act — must lie in a Russian's understanding and reverence for Pushkin's original poem. When this Tatyana sits to write her letter (which serves in the ballet to introduce a dream wherein she summons up her idealised view of Onegin) we know that she hears Pushkin's words, dashes them impetuously on to paper, and with girlish indecision crumples her first draft and starts again. The succeeding *pas de deux* shows Tatyana's ardent imaginings made real: rarely has dancing seemed more ecstatic or more youthfully fresh than when Makarova flung herself into Breuer's arms and was held radiant high above his head in the climactic lift of the duet. The magnificent stretch of limbs, the joyous curve of the body, told everything of Tatyana's character, of Pushkin's heroine.

Makarova's Tatyana is a girl caught up in the idea of romance, finding in Onegin a focus for her passion, and transformed thereby — we see this is her eddying backward exit on point from the garden, like an indrawn breath of delight. The eagerly expectant creature at Mme Larina's ball, which starts Act 2, her eyes always on Onegin to discover his response to her letter, and the distraught and rejected figure who must try and dance with Prince Gremin, are sketched by Makarova with vivid simplicity. Tatyana's quick emotions burn through the dance and through the dancer's body, and burn away her innocence. Her desire to reconcile the quarrelling Lensky and Onegin, to bring Olga back to her fiancé, are an attempt to reassert an earlier, happier order in her world: Makarova standing rigid, an arm crossed over her breast to clasp her shoulder, gazing after Onegin's fleeing figure when the duel has taken place, is also watching the end of Tatyana's youth.

It is a particular merit of Makarova's interpretation that she can make clear those correspondences which link the young Tatyana with the mature Princess in Act 3 to whom Onegin returns. After her loving farewell to Gremin there comes a clear echo of the early letter scene when she sits nervously reading Onegin's impassioned note to her. The ensuing duet, her body now reaching away from his embrace, twisting and turning, yet suddenly acknowledging her feeling for him and still finding strength to reject that feeling, was a superlative display of a dancer's art (and, from Peter Breuer, of sensitive response and faultless partnering). The urgent impulses of her movement, the conflict between lingering emotion for Onegin and her genuine love for Gremin, find most eloquent expression in every bend and spiralling turn of Makarova's body. We see a great dancer entirely in sympathy with a role; we see, and this is no less important, a Russian artist asserting certain national qualities that lie at the heart of the role. Makarova speaks Tatyana's language.

Peter Breuer's Onegin, as I have indicated, is a serious, committed interpretation and a magnificent support for Makarova: Louise Lester, Ferenc Barbay and Peter Jolesch, as Olga, Lensky and Gremin, give well-rounded interpretations. The Munich company's account of the work is sound, especially pleasing in buoyant group dances to which they bring generous physical involvement.

Book Review

Michael Coveney

An Introduction to 50 Modern British Plays by Benedict Nightingale. Pan Books, £2.95, 479 pages.

The best theatre books of recent years have tended to offer thorough documentation, in a lively style, of major movements. Such has been the achievement of Howard Goorney on Theatre Workshop, Irving Wardle on the English Stage Company and Sally Beauman on the RSC. Alongside these major projects, there is the ceaseless ebb and flow of small study and academic exegsis on figures like Pinter, Stoppard, Beckett and Osborne.

Very little of this latter phenomenon seems to serve any purpose at all beyond furthering the author's career among gullible American students or proffering short cuts for lazy teachers and O-level crammers. Benedict Nightingale's handy tome sails a little close to the wind at times, but is generally a most welcome cut above the general second-rate clamour.

He covers the 20th century from James Barrie's *The Admirable Crichton* (1902) to Trevor Griffiths' *Comedians* (1975) with cool reason, incisive argument and critical rigour. Each author receives a pocket essay before one or more of his plays is examined in some detail. Nightingale never resorts to the mere recounting of plots, but flavours his analyses with deft reference to others' scholarship and his own extensive experience as a theatregoer and critic (he has been on the New Statesman since 1968).

Everyone from Shaw to Stoppard, Brighouse to Storey, O'Casey to Brenton, is subjected to the same lively treatment. On the Statesman, I must say I feel that Nightingale has somewhat unhappily cramped his style of late to suit the recently withered, badly written pages around him. But here you can read him expatiating sensibly on Maugham, R. C. Sherriff and Rattigan without fear of editorial ridicule.

Indeed, his 20 pages on Noel Coward are almost the best part of the book and remind one of how urgently needed is a full-scale critical reappraisal of the Master. He gives Coward his due for flippancy, but is deadly, and brilliantly, serious on Coward's deployment of platitude, rhythmed banality and subversive, but simple, philosophy. The discussion of *Hay Fever* and *Private Lives* I declare compulsory reading for all knockers and dullards.

The choice of playwright wavers a little towards the end. Room should have been made for David Hare and Peter Nichols, and I reckon that *What the Butler Saw* should have been prefered to *Loot* in the Orton section, while a case could be made for excluding Christopher Fry and Robert Bolt altogether. But Nightingale is alive to the inevitable invidiousnes of his selection, and tempers all his choices, and indeed his arguments, with humility and good humour.

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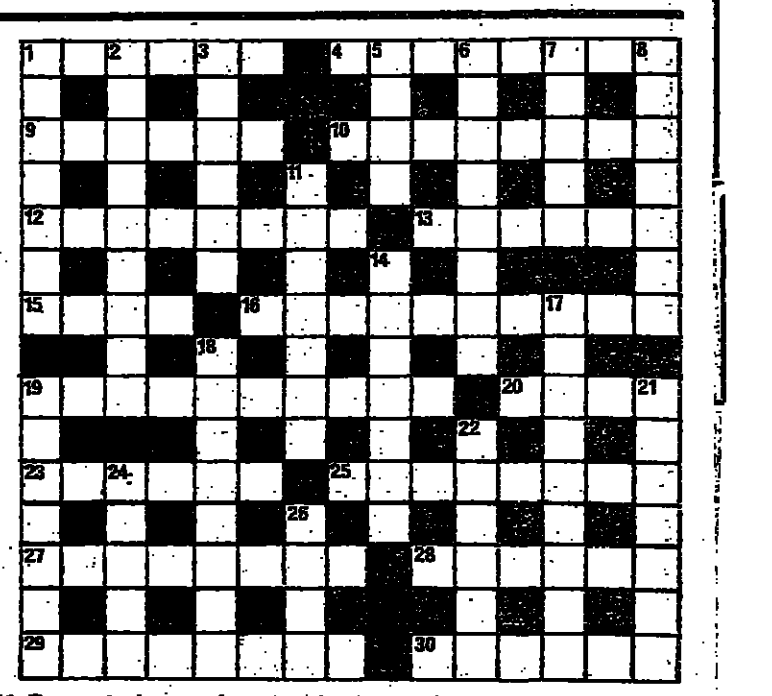

ACROSS

1 V-sign shows one is not in agreement! (6)
4 Record turnover? (4-4)
9 Adopt a new attitude in sleep (6)
10 Rows about stray dogs (8)
12 Blissfully unaware (8)
13 Hamlet has to be re-written for her (6)
15 Not the final temperature (4)
16 Granted by letter (10)
19 Is hesitant when perplexed? Quite the contrary. (10)
20 Wide smile gives support (4)
23 Take cover (6)
25 Is he in no hurry to act? (8)
27 Colourful display of arms (8)
28 A dynamic proposition (6)
29 Dons went berserk — rusticated (4, 4)
30 A speaker who is skilled at splitting alternatives (6)

DOWN

1 Film with a good finish (7)
2 In a sorry state? (9)
3 Possibly run and see to make certain (6)
5 Growth seen when ship's bottom is turned over (4)
6 Cash exchanged in pure monetary transaction (8)
7 Having no flaws, though I have a lot (5)
8 Take a liberty? (7)
11 Enraged by exchange of letters (7)
14 Irreverence shown by the little devil I have yet to reform (7)
17 The present perfect? (5, 4)
18 Surprised to find the vehicle is carrying acid (8)
19 Gets off with a slight dislocation (7)
21 Itinerant craftsman (7)
22 Slightly exaggerate an account and blush (6)
24 Her calling is a dangerous one (5)
26 Collect one's pay with a minor rise (4)

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Friday July 16 1982

Shultz picks up the reins

FOR THE first 18 months of Mr Ronald Reagan's presidency, Mr Alexander Haig was widely regarded on this side of the Atlantic as the only major figure in the U.S. administration who was sympathetic to the concerns of Western Europe and ready to stand up for them in the inter-departmental arguments in Washington. In some very important respects, this was not an ill-founded judgment; if it had not been for Mr Haig, for example, it is not at all certain that the U.S. would now be engaged in negotiations with the Soviet Union both on intermediate-range and on strategic nuclear weapons. What took time to sink in, on the other hand, was that he pursued certain other policies—the almost unconditional support for the Begin Government in Israel, for example—which seemed less advisable to Europe, and that his style was disruptive of steady foreign policy.

The style of Mr George Shultz, who has received the unanimous recommendation of the Senate foreign relations committee to take over as Secretary of State, will almost certainly be less combative. He has long experience of government under previous administrations, at the Department of Labour and at the Treasury, and he has a well-established reputation as a team player. In his opening testimony to the Senate committee he repeatedly stressed that he would be carrying out President Reagan's foreign policy, whereas Mr Haig had too often given the impression that he was trying to carry out his own foreign policy.

Significant

Mr Shultz's past experience may have lain primarily in the fields of economics and business, rather than in that of foreign policy proper: but his statement to the committee is witness of a mature mind, capable not merely of giving a loyal account of the President's foreign policy positions, but also of sprinkling it with subtle and possibly significant glosses of his own.

He certainly inherits a formidable array of problems, in relation both to the Soviet Union and to America's allies in Western Europe. The Reagan administration has tended to adopt a confrontation stance towards Moscow which at times has alarmed European opinion, through its emphasis on rearmament and nuclear strategy. More recently it has angered European governments by the attempt to put economic pressure on the Soviet Union through the embargo on components for the gas pipeline.

It is too early to say how Mr Shultz's appointment will influence U.S. policy on East-West relations—his assertion that the U.S. was prepared to establish "mutually beneficial and safer relationships with the Soviet Union on the basis of reciprocity" is a formulation which leaves many questions unanswered. But it must be significant that he was prepared to say, before his confirmation, that "as a general proposition, the use of trade sanctions as an instrument of diplomacy is a bad idea."

But the most urgent problem facing American diplomacy is the crisis in the Middle East, in which the U.S. is already, as so often in the past, actively engaged as negotiator and go-between. Much of his Senate testimony was concentrated on this issue, and the flavour of it seemed much more even-handed as between the interests of the Israelis and the Arabs than perhaps might have been expected from Mr Haig.

New emphasis

There was no suggestion of any weakening of American support for the security of Israel, which he described as "our closest friend in the Middle East." But his references to the legitimate needs of the Palestinian people, and the right of representatives of the Palestinians to take part in a negotiating process, while not inherently divergent from previous American orthodoxy, certainly seemed to give new emphasis to this aspect of the Arab-Israeli conflict. He gave no support to the notion of military solutions in the Lebanon: "We cannot accept the loss of life brought home to us every day on our television screens."

The European Community has long argued the case of the rights of the Palestinian people; but while Europe has had an objective, it has lacked both a strategy and the means of carrying one out. The U.S. has the means; it is now up to Mr Shultz to see whether these means can effectively be used to defuse the crisis in Lebanon.

Covert protection, back-door subsidy

THE GOVERNMENT is reported to be preparing a new issue, as it were, of enterprise zones, in which exemptions from taxes, rates and regulation will be offered to tempt the hesitant entrepreneur over the brink. This does at least show an urgent concern for the plight of some of the most run-down parts of the country. However, when taken together with other current policies — the tax concessions to the oil companies which have provoked a lawsuit from ICI, and the protracted bargaining with Nissan — it also suggests a disturbing blind spot in the Government's thinking.

The central ideas in the Government's economic philosophy are the virtues of free decision subject to market discipline, and the dire economic effect of high public spending. The Government also seems positively enthusiastic about using special exemptions to encourage particular activities; yet these are market distortions, achieved by a looking-glass version of higher public spending.

There are a number of insidiously appealing arguments for these breaches of principle. One is that we must keep up with the Schmidts and Duponts (not to mention the Watanabes and the O'Kellys). Since all countries woo multinational capital with special incentives, we must join in, or we will see no investment.

Favourable

Most regrettably, this is in some senses true; and a similar logic leads to other counter-productive policies. It is openly urged that British industry must have access to energy and feed-stocks, steel and credit on terms as favourable as any of its competitors. More quietly, civil servants are reminded "whose side they are on" in the unsung trade war of red tape, technical specifications and other non-tariff barriers.

The case for enterprise zones is more seductive, for these zones are not only supposed to contribute to regional revival, but to act as model farms, as it were, for the Government's ideas of economic husbandry. See, the Chancellor agrees, how enterprise flourishes where tax burdens and bureaucracy are reduced.

Resources

There are a number of arguments which need to be restated against this whole approach. In the most general sense, the case for free trade and market discipline has never rested on any assumption of universal virtue. Countries which do not distort incentives generally make more effective use of their resources than those which over-ride them.

It is true some Governments—notably the Japanese—do seem to have had some success in using a mixture of incentive and protection to encourage the growth of the industries of the future, but that is not how the game is usually played.

Decline

It must also be remembered that any covert protection or subsidy for a particular project hurts not only its foreign competitors, but its established competitors at home. That is why ICI is suing the Government, and why, more generally, the growth of state-backed large-scale industry in Italy has been mirrored by the decline of the large Italian private enterprise corporation. Only the black economy, it seems, can flourish in the shadow of state "incentives."

This points to a final moral: total escape from tax works just as well as exemption. To abolish what remains of corporation tax in this country would cost less than £3bn—a fraction of the cost of various special incentives; but this general incentive would remove distortions, and save a fortune in administration.

Covert protectionism is best fought by opposing it, as in the recent consensus on export credit, and not by following bad examples.

THE AEG REORGANISATION

What GEC could offer

By Guy de Jonquieres in London and Kevin Done in Frankfurt

BRITAIN'S GENERAL Electric Company has clearly emerged as a key element in any attempt at a private sector solution to the financial crisis facing West Germany's beleaguered electrical giant AEG-Telefunken, its banks and, increasingly, the Bonn Government.

Exactly what has been discussed in the past few weeks by Lord Weinstock, managing director of GEC and Herr Heinz Dürr, chief executive of AEG, only the two men can know for sure.

But while other possible bidders have been rumoured—United Technologies of the U.S. is frequently mentioned—only GEC appears to have placed outline proposals on the table.

It is considering acquiring 40 per cent of AEG-Technik, a new company to be formed after a planned reorganisation of the German group. AEG-Technik, which would have sales next year of about DM 11bn (£2.4bn), would combine AEG's most viable businesses, capital goods, electronics and high technology products. GEC would pay DM 300m for its stake in AEG-Technik's initial capital and provide a further DM 450m in interest-free subordinated loans.

The plan still faces many hurdles. Herr Dürr is seeking state loan guarantees of DM 1.55bn as part of the deal, and the distribution of AEG-Telefunken's massive DM 5bn debt after the planned reorganisation has yet to be decided. Herr Dürr must also win approval from a reluctant workforce, which fears for its jobs if GEC is brought in.

Nor would the reorganisation resolve by itself AEG-Telefunken's two biggest problems, its consumer electronics and domestic appliances businesses, which would be hived off into separate companies. Prospects for curbing the heavy losses from both operations look bleak unless they undergo extensive surgery.

If a link were forged with GEC, AEG-Technik would benefit from an immediate capital infusion from a well-managed, financially strong partner with liquid assets of more than £1bn. GEC would gain a substantial stake in a capital goods business with an array of technological expertise which, according to Herr Dürr, will move back into the black this year.

Moreover, AEG's spread of geographic markets neatly complements GEC's own. The British company's presence in continental Europe is surprisingly modest for a group of its size. Its sales there last year totalled £750m, less than one-sixth of its £4.95bn turnover. Only a third of the £750m was accounted for by local subsidiaries on the Continent.

GEC is, however, strongly represented in North America and does good business in a number of Commonwealth countries, and former British zones of influence. It has also looked principally to the U.S. for its recent foreign acquisitions, notably A. B. Dick, the office products manufacturer, and the Picker medical electronics company.

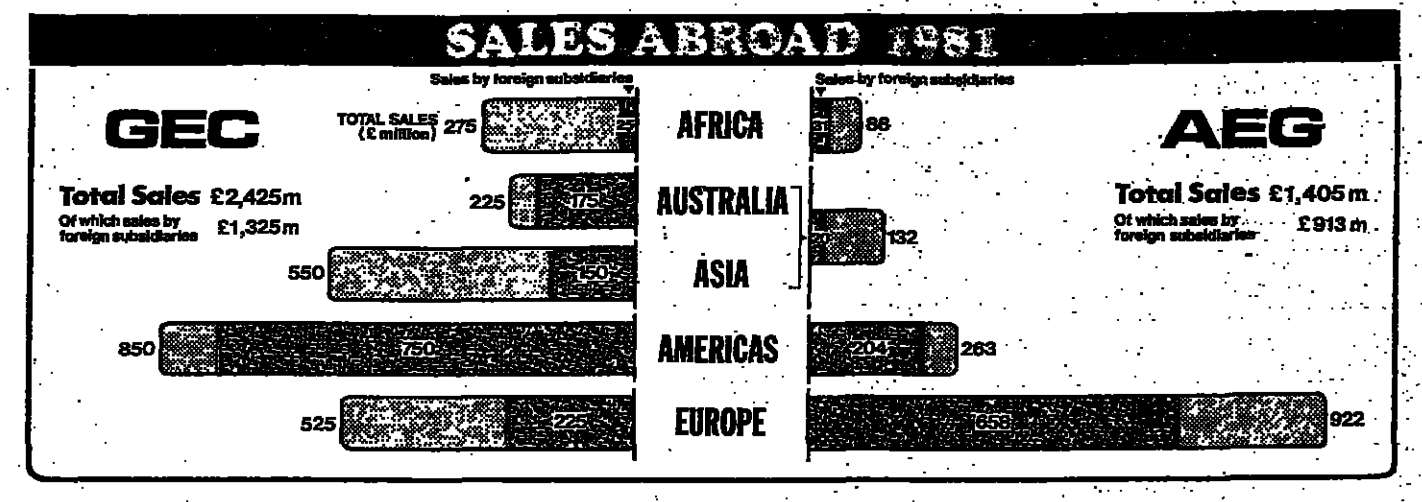
HOW THE TWO COMPANIES COMPARE

GEC

(estimated figures for year to March 31, 1982)
Turnover £4,950
UK sales £2,525m
Profits £584m (before tax) £365m (after tax)

AEG Telefunken

(figures for year to December 31, 1981)
Turnover DM 14.8bn (£3.25bn)
West German Sales DM 8.4bn (£1.84bn)
Profits —DM 642m (—£141m) (after tax and before extraordinary items of +DM 666m (£146m)



Business groupings in the UK

POWER ENGINEERING: Turnover £589m. Pre-tax profit: £59m.
Main activities: Turbine generators, gas turbines, switchgear, transformers, rectifiers, insulation products and plastics.
INDUSTRIAL: Turnover: £359m. Pre-tax profit: £44m.
Main activities: Industrial and marine diesel engines, large and small electric motors, gears, illuminated signs, ventilation products.
ELECTRONICS, AUTOMATION AND TELECOMMUNICATIONS: Turnover: £1.4bn. Pre-tax profit £210m.
Main activities:
Marconi companies: Avionics, civil and military communications, satellite communications, radar, space and defence systems, instruments, broadcasting equipment.
Electronics and automation: Railway signalling equipment, traffic control systems, minicomputers, industrial and numerical controls, robots, mechanical handling, medical equipment.
Telecommunications; Switching and transmission equipment, office products.
COMPONENTS, CABLES AND WIRE: Turnover £441m. Pre-tax profit: £43m.
Main activities: Valves, microelectronic components, weighing machines, measuring equipment, central heating products, power and communications cables, wire, fusegear, heating elements, electrical switchgear.
CONSUMER PRODUCTS: Turnover: £277m. Pre-tax profits: £11m
Main activities: Lighting, television manufacture, domestic appliances, kitchen furniture.

OVERSEAS SUBSIDIARIES
EUROPE: Turnover: £225m. Pre-tax profit: £12m
Activities include: electrical installation materials, industrial components, diesel engines.
THE AMERICAS: Turnover: £750m. Pre-tax profit £12m.
Activities include: A. B. Dick (office products), Picker.
AUSTRALASIA: Turnover: £175m. Pre-tax profit £15m.
ASIA: Turnover: £150m. Pre-tax profit: £15m.
AFRICA: Sales: £25m. Pre-tax profit: £5m.

AEG—Technik

(as it would emerge from planned reorganisation of AEG-Telefunken)
Turnover, year to Dec. 31, 1981: DM 10bn (£2.12bn)
Estimated loss: DM 170m (£37.3m)

Business groupings worldwide

POWER ENGINEERING AND INDUSTRIAL SYSTEMS: Worldwide turnover: DM 5.9 bn (£1.29bn).
Divisions:
● Energy Technology: Power stations, gas and steam turbines, electrical switchgear, motors and generators.
● Industrial Technology: Industrial and marine automation systems, heating controls.
● Traffic Systems:.
● Defence Technology: Radar and radio communications, monitoring and reconnaissance equipment, solar power, space systems, ship control systems.
● Systems Components: Power electronics, low voltage switchgear, electric motors.
COMMUNICATIONS SYSTEMS: Turnover: DM 834m (£185m)
Divisions:
● Telecommunication Technology: Telecommunications and satellite equipment, remote monitoring devices, radio telephones.
● Information Systems: Factory and office automation, data networks, data management systems, data terminals, letter sorting systems.
● ATM Computer: Joint small computer venture owned 75 per cent by AEG-Telefunken and 25 per cent by Modcomp of the U.S.
STANDARD PRODUCTS: Turnover DM 2.2bn (£480m)
Divisions:
● Electronic Components: Microelectronic devices, semi-conductor lasers.
● AEG-Kabel: Power and communication cables, optical fibres.
OFFICE EQUIPMENT: Turnover: DM 1.1bn (£240m)
Consists of Olympia Werke. AEG's interest reduced from 100 per cent to 51 per cent last year as part of deal in which Bosch and banks acquired 49 per cent. Olympia makes typewriters, word processors, small computers.

AEG has traditionally depended heavily on its home market and has a solid share of key public sector purchases of equipment for defence, posts and telecommunications and the railways. Like GEC, it is the largest supplier of electronic equipment to its national defence ministry, and in certain military areas it has almost no serious domestic competitors.

Its highly profitable radar and radio systems group is prime contractor in a programme to equip the German Navy with a new class of 20 fast patrol boats. The marine management division is responsible for the weapons guidance system of the current German frigate programme and is involved in the Tornado fighter and Leopard II battle tank projects.

AEG's foreign operations are concentrated particularly in the rest of Europe and in South America, and it has a number of local subsidiaries in both regions. It has also won export orders for a wide range of electronics products and industrial plant from the Middle East and South East Asia.

However, the two companies' product lines are remarkably similar, ranging from the "heavy" end—gas turbines and industrial equipment—to areas such as telecommunications, office systems and process control which increasingly involve the application of microelectronics.

None the less, there seems to be a potential for some useful collaboration at the margins. AEG is proud of its solar power technology, a field in which GEC is not deeply involved, while the German group cannot match GEC's recently expanded activities in robotics and medical electronics.

There is scope no doubt for valuable exchanges in defence technology, while both companies could gain from a closer association in conventional power stations which would strengthen them in international competition against heavyweights such as Siemens—Kraftwerk Union of Germany and Brown-Boveri of Switzerland.

The broad identity of business interests gives acute concern to AEG's unions, which estimate that there is a 75 per cent overlap between the two companies' product lines. They are worried that GEC is mostly interested in moving in on AEG's markets and would, if it gained effective control, undertake a radical pruning of businesses in which AEG would fare worst.

By all accounts, Lord Weinstock's meeting with the unions in Germany last weekend did not remove these suspicions: all the less so since he refused to give any guarantees about future job security or his influence on AEG management policy.

But there are grounds for believing that GEC's intentions are not so rapacious as the unions fear, and that it is aiming at something less than full integration of AEG with its own operations. For a start, GEC is not seeking majority control from the outset, a clear break with its approach to previous acquisitions. Though the proposed arrangements would undoubtedly give it a major say in AEG's affairs, GEC is said to have proposed initially taking an equity stake of less than 40 per cent.

Those who have talked privately with Lord Weinstock have come away convinced that GEC wants to make a long-term commitment in Germany, not a lightning asset-stripping raid. He is reported to want Herr Dürr to remain in charge of AEG's future management, describing him as a partner and his own prospective role as that of advisor. Herr Dürr has also insisted that there is no question of AEG ceasing to be genuinely a German company.

It is certain that the talks between the two companies could not have progressed this far if the two men did not share similar management philosophies and mutual respect. Herr Dürr has expressed public admiration for the way in which Lord Weinstock has transformed an assortment of previously troubled companies into a highly profitable group.

In essence, Lord Weinstock's formula has been to operate GEC as a "federal" company. He has devolved to its divisions and subsidiaries responsibility for operational decisions, such as product development and marketing, while subjecting them to a system of rigorous financial control.

AEG-Telefunken, by contrast, has long had an extremely centralised management structure, which critics blame for making it slow-moving and unresponsive. Its headquarters in Frankfurt employs 1,200 central staff, while GEC has only about 100 at its head office.

From his own statements, it appears clear that Herr Dürr is looking to GEC not just for money, but also as a source of management experience and support as he strives to mould AEG's bedraggled empire into a sound and profitable business.

"GEC has a unique combination of banking and industrial management skills," says Mr Ian Cole of London stockbrokers James Capel. "It can play a role not dissimilar to that which the large German commercial banks have traditionally played in directing the more successful parts of German industry."

The challenges remain formidable and could take some years to overcome. GEC's experience with some recent takeovers has not been entirely trouble-free, and it has yet to bring the performance of acquisitions such as A. B. Dick and Avery's up to the same standard as the rest of its activities.

But AEG-Technik, stripped of the loss-making consumer and appliance operations, would possess a portfolio of businesses in areas which have proven highly profitable for GEC. If the application of management attention could raise its margins and growth prospects close to those enjoyed by GEC, it would be reasonably expected to command a market capitalisation comparable to that of the British company, which is currently valued on the London Stock Exchange at more than £5bn.

Men & Matters

Account ends

As if Aslef's activity—or lack of it—were not bad enough I now understand that the Stock Exchange is trying to call a stop to the market's gravy train. Stockbrokers and jobbers have been told by the Council that members may only undertake "normal and reasonable expenditure in relation to entertaining clients in the ordinary course of business."

In cases of difficulty, further guidance should be obtained from the membership department, it says.

This will strike a chill in the offices of pension fund managers and investment managers. For that innocuous notice could upset their lives more than Ray Buckton.

Fund managers have grown accustomed to the hospitality of brokers—who are chasing other people's money which the fund managers look after—and will obviously now have to lower their expectations.

Seats at Glyndebourne, Wimbledon, dinner at the Mirabelle, a Cowes weekend, a box at Covent Garden and the other little luxuries they have come to expect may continue.

But the Exchange does not like giving away its services. It prefers money flowing in its direction. Realistic fees, says the Exchange, must be supplied on certain matters outside investment counselling. So if you are a fund manager looking for a second home in the Balearics do not ask your broker. He may merely invite you out to Tubby Isaac's to talk about it.

Super tramp

In shipping circles they do not seem to talk about tramp steamers any more. The favoured circumlocution is general cargo carrier. But it does not have the same salty style.

Derek Kimber, the burly chairman of Austin and Pickersgill, the north-east coast shipbuilder now part of British Shipbuilders, is not a man to be diverted by a fad. His SD-14 15,000 tonner is a modern tramp, he says. What is more it is a super-tramp trading successfully in every ocean and sea in the world.

Austin and Pickersgill this week celebrates the launch of the 200th SD-14. That is a remarkable achievement in an industry in which production runs for merchant ship designs are usually reckoned in single figures.

After the redoubtable Liberty ships — some 2,500 of which helped to win World War Two —the SD-14 is now the most popular vessel in the history of the steam ship.

Number 200, named Anisio Borges, is being built in Rio de Janeiro by the Brazilian shipbuilder Companhia Comercio e Navegacao. She is the 37th in a run of 43 SD-14s being built there.

Part of the success of the SD-14 is that Austin and Pickersgill has been licensing building round the world since the design left the drawing board 14 years ago. An SD-14 built overseas brings in only about £50,000 to Austin and Pickersgill in royalties compared with £7.3m for a complete ship built in Britain. But Kimber reckons that licensing has proved good business and will help keep the marque in the forefront of world shipping for a good many years to come.

No wine bars

The Welsh language can be used for all or any of the information on a wine label from next week. Having gone so far to emancipate drinking Welsh nationalists, the EEC mandarins in a new ruling from Brussels add the restriction that the information on the bottle must also appear in one of the official Community languages as well. While that might irritate the Welsh it must be a great relief to the rest of us.

Are we then to be treated to Welsh Claret blas ffrwythog llawn—that is, full of fruity flavour? The Welsh Office does not think so. No Welsh wine industry exists it reported last night after research. But Welsh friends report sightings of isolated wine cultivations while travelling the Principality. Perhaps even now an entrepreneur is tending the first truly Welsh vintage.

Meanwhile, a Cardiff wine merchant Paul Morgan who has been astutely marketing a German bottled wine labelled solely in Welsh for non-inquisitive patriots will have to get some new labels printed.

Leisure line

"Amazing some of the things that people do in their spare time," says Nigel Powell, of Leisure Line. "We have one customer looking for a python who says he already has a boa constrictor. Another has a mediaeval lute for sale."

Powell, with fellow Birmingham University graduate Christopher August, and a £35,000 loan from Industrial and Commercial Finance Corporation, set up Leisure Line in London's Hammersmith three months ago to provide a computerised quick sales service in second-hand leisure goods.

If you are bored with your latest pastime and want to recoup some of the money you spent on equipment, you simply phone in the details, which are then fed into a computer for regurgitating to prospective buyers when they ring the company. Charges range, according to the value of the goods, from £5 to £25 for three months.

Powell, whose father is Minister of State for public utilities and transport in Jamaica and whose grandfather was education minister in Malaysia, says: "We have handled just about everything so far from a harp to a houseboat."

The prospect of increased leisure time for us all, he says, is one that he looks forward to with growing optimism.

Down market

Scotch whisky, it seems, is losing face in Japan because it is selling too cheaply.

Tamizo Ishikawa, head of the wine and spirits importers' association in Tokyo, says that the price of a standard Scotch is now well below that of the Japanese brands. Because of imports by unaccredited agents, bottles of Scotch are on sale, if my arithmetic is right, at between £2.25 and £6.75 below the recommended price.

But whereas you and I would rush to take advantage of such offers, the Japanese in what is a traditional gift season, are shunning the stuff. What Japanese customer, says Ishikawa, would dream of offering someone a cut-price gift?

And even more pertinently, he asks of Scotland's distillers, what wholesaler or retailer is going to continue to carry stocks of spirits with such a minute profit margin?

Insurance cover

Drawing upon more than 80 years of experience, Lord Denning recently advised the Worshipful Company of Actuaries: "I like to eat with nice people; to drink with nice people; and to sleep with a clear conscience."

Observer

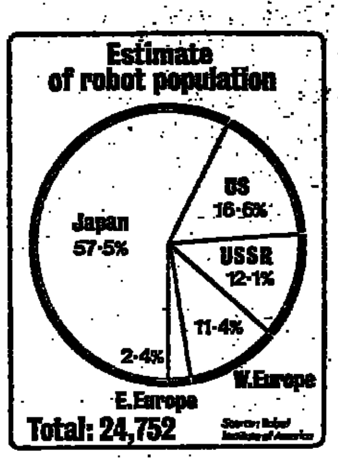
FINANCIAL TIMES SURVEY

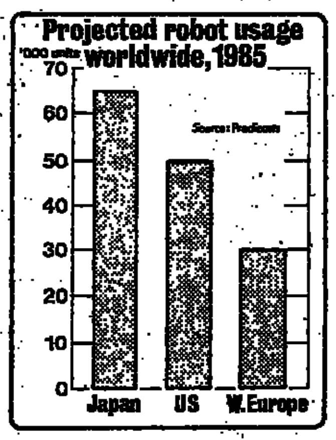
Friday, July 16, 1982

The pace of factory automation is quickening—some of the world's more foresighted manufacturers believe that the "unmanned factory of the future" could be a reality within five years, rather than by the turn of the century.

Manufacturing Automation

A line of robots being checked at ASEA, the giant Swedish industrial company, which has recently received orders from the West German motor industry for 105 robots.





A revolution on the factory floor

By ALAN CANE

THE FACE of manufacturing industry has been changed irrevocably in less than a decade by new techniques for automated production, based on relatively cheap computer power.

Machine tool manufacturers and their customers have been affected equally drastically. Machine tool makers in the U.S., the UK and in Europe have seen their markets threatened alarmingly as Yamazaki, Hitachi and Seiki, Nakamura and Fujitsu Fanuc became commonplace words on machine shop floors. In the UK, Alfred Herbert, the distinguished flagship of the British machine tools industry, already hit badly by the recession, crashed in 1980 with losses of £56m.

A year later, Mr Ron Lynch, chairman of a revamped and resuscitated Alfred Herbert, warned that the Japanese were "intent on wiping out our machine tool industry."

The evidence was hard to resist; 55 per cent of the numerically-controlled lathes in Britain were of Japanese origin.

At the same time other changes were taking place. An entire raft of companies which had never been part of the tool-making business, suddenly sprang into prominence; these were the computer and electronics companies, skilled in the development of the hardware and the sophisticated software needed to drive the new machines.

Thus, IBM emerged, last year as one of the U.S. leaders in computer-aided design and computer-aided manufacturing technology; at the end of the year IBM launched its first, small, but impressive robots.

Texas Instruments, Hewlett-Packard, Honeywell, NCR, Sperry-Univac and a host of other computer companies can reasonably claim that they can supply a sizable part of 'the factory of the future."

Manufacturing industry itself has been shaken by evidence from Japan, from Sweden and, to a lesser extent, from the U.S. and Germany, that production costs and manning levels can be reduced drastically using the new technologies.

That is why, despite the depressed state of the world manufacturing industry, the bigger—and more enlightened—machine tool manufacturers are gripped by a somewhat repressed excitement.

They anticipate a world in which the typical manufacturing plant will be staffed by automatic machines, serviced by robots and controlled by computers.

Typically, such a "factory of the future" would be run from the order book. An order from a customer would be stored in the main computer which would generate a request to the computerised drawing office to design the parts required.

It would direct automatic warehousing and palletising machinery to remove the necessary raw material from stock and instruct remotely-controlled trucks to deliver the raw materials to groups of computer-controlled machine tools.

Robots would move the parts through the machining process before they were transferred to a fully automatic packaging and despatch line. Such a factory does not yet exist—but some that do are close to the ideal.

Mr Frank Curtin, group vice president, machine tools, for Cincinnati Milacron, one of the world's leading makers sums it up: "We are excited because the use of these new techniques offers the only opportunity for a company on a worldwide basis to become a high-quality, low-cost producer."

The Japanese, he pointed out, were moving low technology production out to countries with lower labour rates, while automating high technology production as rapidly as possible.

Describing the present state of the U.S. machine tool market, with considerable understatement, as "lousy," he went on to point out that the level of inquiries for automated manufacture at Cincinnati had never been higher; he had never seen so many senior executives becoming involved in the planning of manufacturing production—"most of the early automated manufacturing systems were failures because senior executives would not get involved. When the recession lifts and these inquiries are translated into orders, the new systems will be successful."

In Sweden, Mr Sven-Erik Andersson, managing director of SMT-Pullmax, a leading computer-controlled lathes manufacturer, argues that chief interest among potential customers is in more sophisticated systems, even if business is 50-60 per cent down.

And Mr Bjorn Weichbrodt, general manager of the industrial robot division of ASEA, the Swedish industrial giant, plans to grow by 60 per cent this year—"last year we sold 500 to 600 robots. Our target this year is 900 to 1,000."

Major step

The revolution that has been taking place is of course based on microelectronic technology. The factory of the future is, however, already here and now—not in its most advanced manifestation, but in applications which rule out any suggestions that the claimed benefits are not genuine.

Chief among these, production level can be kept high, inventories and stocks can be cut drastically, quality can be massively improved. The Japanese have shown it can be done; now the rest of the manufacturing world is running to catch up.

The ideas and concepts in advanced manufacturing systems of the kind now being installed are hardly new; what has made the difference over the past few years is the availability of low cost, reliable and sophisticated control mechanisms. The credit for popularising these systems which rely on computer numerical-control lies with General Electric of the U.S. and with Fujitsu Fanuc, which could be described as "the IBM of the

CONTINUED ON PAGE VIII

A programmable welder—a combination of BOC welding equipment and a Hall Automation robot.

IN THIS SURVEY

MANUFACTURING AUTOMATION II

Ian Rodger on improvements in the application of NCs and CNCs in machine tools

Refinements in three separate markets

IT WOULD be dangerous to suggest that the most important advances in the application of numerical controllers and computer numerical controllers to machine tools have already been accomplished.

Compared to the innovations of the past decade, developments look like mere refinements or value engineering. Machine tool manufacturers' attention is understandably drawn away from internal advances to the exciting things that can be done by putting their machines together with robots, conveyors and pallet changers to make production cells and flexible manufacturing systems.

There are still some useful improvements, however, appearing on the NC and CNC machines themselves, notably simpler programming languages, better diagnostic systems and programming aids for NC tapes.

It has been 10 years since the first CNC lathes appeared and for most of that time, computer controllers have been applied mainly to large turning machines and machining centres. The sharp fall in the cost of electronics in the past two or three years however, has permitted the application of CNC to many more types of metal cutting and forming machines.

CNC kits

It has even become practical to adapt computer controllers to old manual machines. In most cases, this is done by stripping the machine and altering its structure but one supplier has emerged in the past few months with a bolt-on CNC kit for certain makes of lathes, for £11,250.

Machine tool makers tend to see three distinct markets developing, each with different electronic requirements.

- Stand-alone machines, often owned and operated by relatively small engineering subcontractors who do a wide variety of jobs. This type of user needs an on-machine controller that can be programmed quickly and easily by an unsophisticated operator to minimise down time.
- Machines that are designed to be part of larger production systems and for which instructions are received from a remote production control computer rather than a local operator.
- Stand-alone machines with long production runs for which a tape-fed numerical controller is adequate.

In a tape-fed machine, the major problem has always been correcting errors after a tape has been cut, there being no alternative to going back to the keyboard and making a new tape. The most popular solution has been to drop NC in favour of the more flexible CNC machines. But these are very expensive. Another solution is to prepare the tape on a computer that has been programmed to detect and signal errors. A recent example is the IAPT interactive system introduced by University Computing early this year.

As the programmer enters geometric definitions or cutter motion commands on the IAPT, the software checks for errors and provides an immediate indication of any corrections needed. It also draws the geometry or cutter motion on a plotter for verification.

Avoiding the rigidity of tape-fed machines was the main attraction of attaching computer controllers to machine tools. Initially, CNC systems were attached to relatively simple lathes which operate in only two dimensions and then to the more complex milling machines and machining centres.

Now, the same process is being repeated with the development of conversational programming languages for CNC controllers. The first generation of these systems has been appearing on lathes and developments are following for milling machines as well.

The idea behind conversational programming is that it becomes easy for even a relatively unskilled operator to program a machine. Fanuc of Japan has led the field but other major manufacturers are catching up quickly.

Take, for example, the recently introduced Acramatic 900 series from Cincinnati Milacron of the U.S. All the operator has to do is key in one of the nine "menu" codes and then the video display unit leads him in plain language messages through procedures for setting up, operation, editing and trouble shooting.

Yamazaki Mazatrol of Japan produces a lathe controller that automatically selects cutting conditions, depending on the material being worked and the tool used.

General Electric of the U.S., which supplies controllers for a number of tool makers, is expected to introduce a conversational system in September.

GEC of Britain, which took over Alfred Herbert's CNC controller business when the venerable machine tool company went into liquidation in 1980, believes that controllers will have to be more adaptable in the future.

It believes that users will want machines that can be programmed by an on-site operator or fed by a tape or attached to a flexible manufacturing system. This means using a high level conversational language that enables the user to add his own programming modules to the controller. The penalty is the need for a larger memory than is common in CNC controllers but GEC believes memory cost will continue to decline.

The company has already introduced a controller of this kind for turning machines and plans to bring out one for machining centres later this year.

Identifying faults

Diagnostics are of major concern to users because they want most of all to avoid machine down time. The latest advances are along the lines of identifying problems. Previously, a controller might just put the word "fault" on its screen and let the operator hunt around for it.

Now, controllers can detect faults, decide how severe they are and choose appropriate responses. Some are just warnings, such as low oil pressure, in which case the controller would alert the operator but carry on working. In more serious cases, the machine would be shut down and the screen would display a code that would lead the operator to the source of the problem.

Other recent developments that will appear increasingly on new machines include adaptive control and in-process gauging. Computer controllers are ideal for exploiting the wide variation in speeds that can be derived from DC motors. Speeds and depths of cut on CNC lathes, however, tend to be the subject of precise programming instructions depending on the material used and the shape of the object being turned.

Under adaptive control, the controller, taking account of the motor's power, automatically and constantly optimises the speed and depth of cut.

In-process gauging is a recently developed process intended to supplant off-line inspection. The controller checks the dimension which has just been machined and, if necessary, makes a second cut.

Undoubtedly, there are going to be many more refinements to CNC machine tools in the future. CNC machines are the only ones for which demand is still growing, and competition among manufacturers is increasingly fierce, as European and American manufacturers fight to regain market share from the Japanese leaders.

Government grants encourage the development of Japanese robot technology, says Jim Heward

Staying ahead in the factory

THE FACTORY of the future is coming along a good deal quicker than the office of the future. There is ample evidence of this in the U.S. where the big money is being spent by companies in aerospace, automotives, electronics, and petrochemicals.

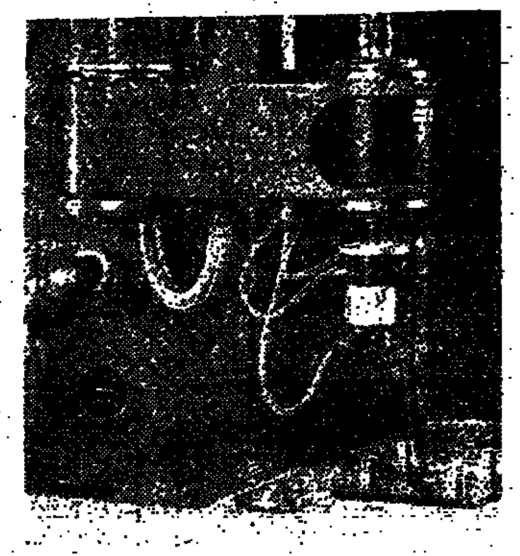
Japan is even more ahead in the factory than in the office partly because, until recently, the Japanese language problem has been a brake on home market development of the latest word processing systems.

In engineering, most production managers are faced with the problem of dealing with batches of components, all requiring varying degrees of work at a variety of processes, often in different sequences. This problem traditionally leads to queues of work building up at the work centres with consequent high inventory costs and long lead times.

Japanese production of robots

	Number of units	Cumulative number installed in Japan	Annual value Ym
1968	200		400
1969	400	600	1,500
1970	1,700	2,300	4,900
1971	1,300	3,600	4,300
1972	1,700	5,300	6,100
1973	2,500	7,800	9,300
1974	4,200	12,000	11,400
1975	4,400	16,400	11,100
1976	7,200	23,600	14,100
1977	8,600	32,200	21,600
1978	10,100	42,300	27,300
1979	14,500	56,800	42,400
1980 (est.)	—	—	60,000
1985 (est.)	—	—	290,000

Note: Under 2 per cent have been exported from Japan and a negligible number imported.
Source: JIRA and Inbucon forecasts.



This compact Japanese-designed robot, the Daros PT 300H from Dainichi-Sykes Robotics, is planned for manufacture in the UK.

The world trend is now to develop manufacturing, material handling and storage systems that are computer controlled and can thus be easily changed from one sequence to another, mainly by altering the computer program that drives the system.

This provides flexibility and leads to the much-used term "flexible manufacturing systems" (FMS). Such a system can be one isolated "cell" or group of machine tools or processes controlled by computer. Alternatively, it can be part of a much wider integrated production system including such aspects as material forming, quality assurance and warehousing.

The U.S., which has traditionally been known for its advanced manufacturing techniques, is now finding itself under increasing pressure from Japan and Europe. This is providing a spur, and perhaps it is not surprising that in such a large country one finds many examples of highly sophisticated and advanced manufacturing methods, particularly in the aerospace and automotive sectors.

Despite the recession and a reluctance to invest, robotics are beginning to catch on in a big way.

Biggest exhibition

In March, Detroit hosted the world's largest-ever robot exhibition, "Robot VI." Close on 28,000 visitors, many of them serious buyers, viewed the offerings from 102 exhibitors, and over 2,000 attended conference sessions.

At the beginning of 1982 there were about 100 different robot models available in the U.S. from 53 robot builders or importers.

Many firms are actively seeking ways of cutting labour costs on assembly. For example, one medium-sized manufacturer in California is developing robots to automate the assembly of hi-fi audio speakers.

Vision systems are being used with and without robots. They use the power of a video camera, which is usually connected to a special microcomputer, to compare the image seen by the camera with a pre-programmed "idea" of what the image should look like. This is ideal for inspection and some U.S. companies have developed interesting applications including automatic inspection of the characters on plastic typewriter keys.

It would, of course, be naive to consider that manufacturing competitiveness can be measured solely by robotisation. However, the degree to which nations invest in robots seems to be correlated with their investment in other forms of automation.

Another barometer of trends in American manufacturing techniques is to look at the exhibits and technical papers that were presented to some 3,000 industrial engineers at their recent annual convention in New Orleans. Industrial engineers are concerned with improving productivity and are often charged with making recommendations on capital investments.

More than half of the New Orleans exhibitors were showing a variety of computerised systems. These include numerically controlled and computer numerically controlled (NC/CNC) tape preparation systems with a strong bias towards integrated computer-aid design and manufacture (CAD/CAM) and graphical aids to tape preparation. Also material-handling systems including laser bar-code readers were much in evidence.

Another group of exhibits were computer aided manufacturing techniques for generating optimum work methods and time standards. Two new microcomputer products, Adam and Capes, were particularly well received.

In Japan there is evidence of large scale capital investment in automated plant for warehousing and production. Many of the developments and innovations are carried out by the companies themselves with a very high degree of interaction between the production engineering and the product design functions.

From evidence provided by Japanese companies, it appears that it is normal for manufacturing industry in the electronic and engineering sectors to invest about 6 per cent of their gross turnover in means of improving manufacturing efficiency.

The extent of Japanese automation and robots has undoubtedly been encouraged by government grants. The initial development of robot technology was started with a £43m government fund and there is currently a government funded project worth £26m to develop a "flexible manufacturing system" based on laser technology.

In addition, there is an £11.8m fund for low-interest loans to help small businesses purchase robots and a plan worth nearly £84m by 1985 for low-interest leasing of robots by all sectors of industry.

Strong efforts

West European aerospace manufacturers are particularly strong in their efforts to beat off U.S. and other foreign competition through manufacturing automation.

Some notable examples include West Germany's Messerschmitt-Boelkow-Blohm's fully integrated computer controlled system for producing aircraft components. This is claimed to have reduced investment requirements by 9 per cent and cut operational costs by 25 per cent.

The French are trying to maintain their position as a dominant manufacturing force in aerospace. They are involved in transferring their industrial techniques and manufacturing knowledge to countries such as India, where manufacturing costs are likely to be lower than Europe.

In Britain, aerospace companies are also ahead with a number of interesting projects. For example, it is reported that Rolls-Royce claim to be reducing the cost of the wheels and disk-shaped parts used in RB211 engines by 15-20 per cent in work hours and as much as 60 per cent in inspection. This is being achieved by an advanced integrated manufacturing system. British Aerospace have other comparable developments.

The use of modern manufacturing systems and knowledge is one way of staying ahead of emerging Third World nations. They are customers today for sophisticated equipment. However, as modern techniques and knowledge becomes more widespread, they will become the competitors of tomorrow.

TEN KEY POINTS TO WATCH

If managements wish to be ahead of international competition, they could do well to consider the ten key points given in the following check list:

- Are you aware of the specific areas in your factory where robots or other forms of automation could yield benefits?
- Are your investment decisions in respect of automation based mainly on savings or on improved market share?
- Do you have a strongly directed quality assurance policy aimed at zero defects?
- Where can automatic inspection techniques be used to monitor quality without incurring labour costs?
- Do you have an industrial relations strategy for introducing new technology?
- Is your workforce involved in decision making?
- Are your stock and inventory levels acceptable? (In Japan, some manufacturing companies are able to operate with 1½ days supply of materials and work in progress.)
- Do you use modern computer techniques with on-line terminals to help with material planning?
- Do you have computerised shop floor data collection and would you benefit from the high level of control that this could provide?
- Are you aware of the Government grants and assistance available to you?

MANUFACTURING AUTOMATION III

Companies involved in the computer-aided design and manufacture (CAD/CAM) sector*

Company	Complete system	Software only	Tel. no.
Applicon	●		061 429 7227
Applied Research of Cambridge	●		0223 65015
Calcomp	●		0334 50211
Calma	●		0276 682021
Cambridge Interactive Systems	●		0223 62247
Compeda		●	0438 56123
CadCentre		●	0223 314848
Computervision	●		0256 58133
Control Data		●	01 240 3400
Delta CAE	●		021 327 3401
Ferranti Cetec	●		0506 411583
Engineering Computer Services		●	0827 873300
Gerber Scientific	●		0274 495811
GE/SDRC	●		0462 57111
GMW Computers		●	04427 5481
Hewlett Packard	●		061 928 6422
Intergraph	●		0753 47033
International R & D		●	0632 650451
Manufacturing Data Systems	●		021 704 4422
Pafec		●	0602 292291
Quest	●		0202 891010
Racal Redac	●		0684 294161
Sperry Univac	●		01 965 0511
Tektronix	●		05827 63141

* Note: This list is not exhaustive and is based on data supplied by companies before the survey.

Comparison of cost of labour with robot prices in Japan

(Values in Ym)

Items	1970	1975	1976	1977	1978
Annual wage	0.852	1.968	2.206	2.412	2.580
Coefficient of labour cost except wages	1.154	1.170	1.173	1.178	1.180
Total labour cost per man year	0.989	2.303	2.504	2.938	3.038
Mean price averaging all types of robot	4.580†	4.060	3.860	4.670	5.230
Mean price of playback robot	11.790†	11.120	11.010	11.900	11.100
Man years equivalent per playback robot	11.9	4.8	4.3	3.8	3.7

† 1971 robot prices.

Source: Umetani.

Annual production of robots in Japan—1974 to 1979

Type of robots	1974	1975	1976	1977	1978	1979
A—Manual manipulator	713	772	697	1,127	1,576	1,051
B—Fixed sequence robot	3,287	3,297	6,199	6,494	7,066	10,721
C—Variable sequence robot				425	652	1,224
D—Playback robots	165	137	183	357	506	662
E—NC robot	1	0	6	11	25	89
F—Intelligent robot	1	12	80	199	255	788
Total	4,167	4,418	7,165	8,613	10,100	14,535

Source: JIRA.

'The West must not lose out in this race'

Geoffrey Charlish reviews some of the rapid advances in computer-aid technologies

AT A RECENT presentation for financial analysts in New York, Mr James Baker, a senior executive of General Electric of the U.S., asserted that managements not planning automation were "frozen like deer in the Japanese headlamps, hoping for some outside force to save them. It won't."

In June, Arthur D. Little experts were making similar comments, pointing out, for example, that many Western manufacturing chief executives have a dozen or more levels of personnel between them and the shop floor, while the Japanese make do with five.

They are predominantly white-collar staff, says ADL's Dr Irvin Kraus, simply because present-day manufacturing consists not so much of fashioning materials as it does of manipulating information.

That, certainly, will be the essence of manufacturing to come, because marketable products—with short lifetimes—will become yet more complex under technology and market influences and so will be more difficult to design and make.

Like the U.S. Cavalry, the computer has been coming to the rescue for several decades. It continues to gallop madly, but its platoons have separated, each chasing Indians of its own. At one time the vision was of one large computer overlooking the whole process, from design to test, from input materials to finished goods warehouse.

The advent of the small, powerful mini- and micro-computers changed all that. Several computer-aided technologies have been born, with acronyms that warrant some explanation.

● CAD, computer-aided design, in which the engineer or designer can "compose" a part, structure or circuit with screen and keyboard plus perhaps an electronic stylus and pad from which he can specify stored combinations of graphical or other data and put them on the screen. Until recently concerned with the routines of mechanical draughting and circuit layout, CAD is now becoming more intelligent.

● CAE, computer-aided engineering, has resulted from this ability to store technology knowledge and apply it automatically. Further clever software allows engineers to try "what if" experiments with the fundamentals of the design, numerically. The results obtained would otherwise need a series of "cut and try" prototypes with live testing or, failing that, extensive calculations. For example, a crane jib or an aircraft wing could be "loaded" until it buckled and the failure points seen on the screen. Formal blueprints vanish and all concerned always see the same thing (from virtually any angle) at the same time on their VDUs. Then, other programs will use the data generated to produce machine tool instructions, mould patterns and before long "flexible assembly" instructions.

● CAM, computer-aided manufacturing. Definitions vary a little, but CAM can essentially be seen as the growing alternative to fixed automation (in which a machine can only make one product). It embraces intelligent robotics and flexible manufacturing in the widest sense. Computers and sensors (visual or otherwise) combine with mechanical devices to give production units that can cope with unforeseen circumstances, ranging from a product change to (ideally) any kind of problem on the line.

● CATS, computer-aided time standards. Where manual assembly remains, as it often will for some time to come, this computerised equivalent of "the time study man" by the H. B. Maynard company will probably gain increasing favour.

● ATE, automatic test equipment. Brainchild of the electronics industry, where the extraordinary complexity of integrated circuit and printed board makes manual testing impossible. Big names in the ATE business are Schlumberger (embracing Fairchild and Britain's Membrain), Teradyne and GenRad, but Fluke, Gould, Hewlett Packard, Marconi Instruments, and Zehntel are all active in a market predicted to grow by researchers Dataquest to $7bn within two years. ATE is now spreading outside the electronics industry.

● FMS, flexible manufacturing systems. Development of the computer to give production machines (mainly metal removal) the ability to deal with a variety of products automatically. Still in research stage with only a handful of installations in Europe.

● CIM. The ultimate acronym? It stands for computer-integrated manufacturing and embraces all of the above. Technology exists already to link these "islands" of design, production, test, and so on.

Research

But these factories of the future are in the laboratory at the moment. For example, at Stanford Research Institute in California, Dr David Nitzan's team linked a pair of robots with other placing devices, bowl feeders and visual systems to yield an unattended assembly station.

In Britain, organisations like the Production Engineering Research Association (PERA) at Melton Mowbray, the CAD-Centre at Cambridge, Cranfield Institute of Technology and several universities offer research and consultancy in these areas.

The linking of the separate items calls for communications over intelligent local networks, an area now under active development for both office and factory.

The continuous process industries (oil, chemicals, brewing for example) are rather nearer to this sort of total control. The product, in pipes, lends itself well and process CAD can now be conducted on the same screen as plant monitoring and control. BBC-Kent, Foxboro, Honeywell, Rosemount, Sybron Taylor and Turnbull are all in this market.

For the moment, however, the "islands" of computer-aided activity in manufacturing remain. Much of the CAD/CAM/CAE industrial expenditure so far has been in design/draughting, in a market that was put at over $500m for 1980 by Merrill Lynch, probably exceeded $750m last year and is put at $2.2bn for 1984.

The front runners are U.S.-based and are Computervision (1980 sales of $190m, or 36 per cent of the market), Applicon and Calma (GE).

Advance towards the automated factory is being held up by investment hesitation and fear of change, according to Dr J. N. Orr, a Sperry Univac consultant. He asserts that newcomers can and should make a start with CAD, because "the unifying thread running through the whole factory is the geometric description of the product."

The West must not lose out in this race. Perhaps some more words from James Baker at GE are appropriate: "The choice is between biting the bullet or biting the dust."

Focus on Baker Perkins, a front-runner in the computer-aided design and manufacturing field

Computer solution to consistent quality

BAKER PERKINS, the Peterborough-based company and one of the world's leading suppliers of food production plant has been a front runner in the supply of CAD/CAM equipment.

Although the company has other interests, print equipment, for example, food processing has been of special interest since the company took computers to its bosom in the 1950s.

There are several main control applications in producing such items as cakes, biscuits, etc, with consistent quality, shape and design—ingredient handing, mixing, forming and baking.

Baker Perkins recogned that the sequence lent itself to microprocessor and programmable logic controllers (PLCs) to produce consistent results with less waste.

Although ingredient handling and weighing areas had for many years had some form of centralised control based on a variety of devices, it was realised that weighing and ingredient routing could be placed under a single controller, or for very large plants several PLCs operating in parallel.

Baker Perkins has also incorporated a PLC into a recently designed small batch, high speed mixer. This provides the entire control for ingredient calling, weighing, mix cycle sequencing, timing and the regulation of dough and mixer bowl temperature.

Comparison

Historical information on the ingredient quantities used for previous mixings can be retained by the PLC. The information can be recalled by the plant operator for comparison with the standard formula or, as a diagnostic aid in the event of a suspect dough mix.

Once the consistent dough mixes have been achieved, the next objective in biscuit manufacture is to produce dough pieces of consistent size and weight.

For pieces formed by cutting, control of the dough sheet thickness fed to the cutter, is one approach. Optical sensors can be used to determine the sheet thickness but problems may arise where the dough surface is irregular or has discontinuities.

Baker Perkins devised a system of sensing the reaction of the first gauge rollers to the dough being fed in and found that for a given situation the signal was proportional to the mass flowrate. This could, therefore, be used to control the sheeter speed to achieve uniform dough metering.

At the final baking stage Baker Perkins has designed ovens with automatic control of temperatures in each baking zone. The distribution of hot air within a given zone can be set by the adjustment of dampers within the circulation duct system, which can be set either manually or remotely from a central control point.

Provision can also be made for the measurement of humidity in each zone. These instruments are capable of measuring humidity directly at temperatures up to 350° C, and assist the baker to set his oven to produce in the most economical conditions.

Baker Perkins, apart from supplying plant to outside users, has also made extensive use of CAD/CAM methods within its own plant.

Mr Ron Jackson, Baker Perkins CAD/CAM manager, has been closely involved with the problems since the 1970s. He quotes the comment that "apart from the propelling pencil, CAD is the only significant advance in drawing technique for more than a century.

"It is a paradox," he says, "that it has taken so long for the working environment of creative engineers to be itself the subject of dramatic technological change."

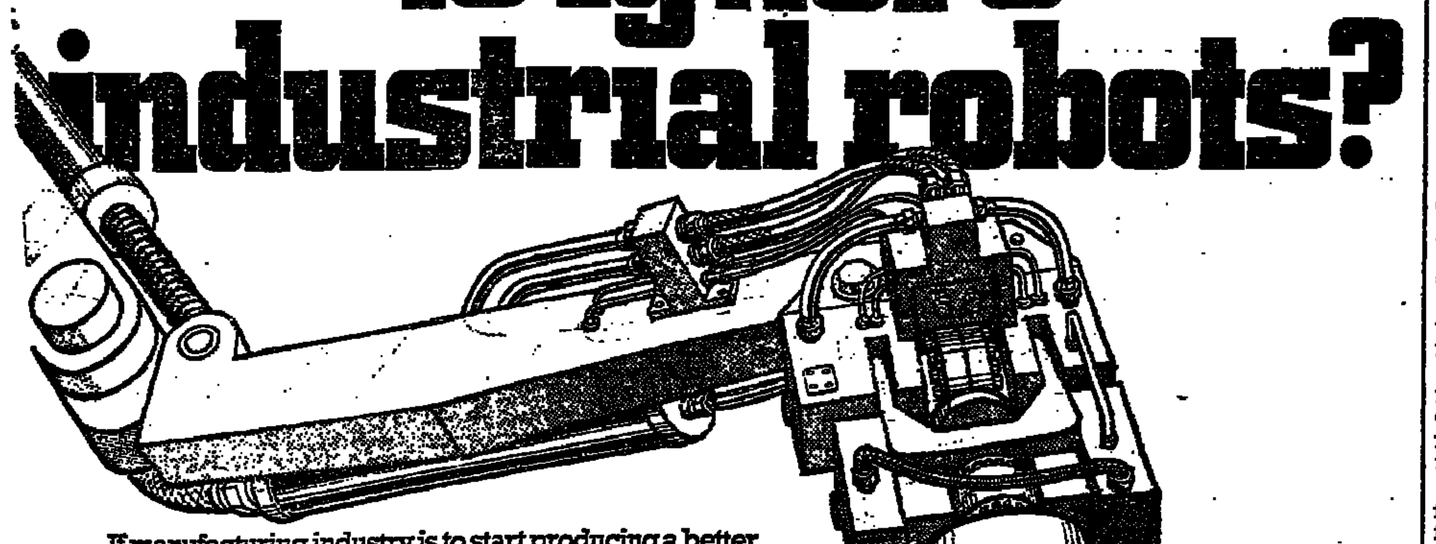
Comparing former manual drawing work with the use of computer-aided designs, Mr Jackson points out that before the acceptance of an agreement with Baker Perkins drawing office staff there was some reluctance to volunteer for training.

"But when training was started almost without exception people responded well as they realised the potential of the system at their disposal.

"One of the most difficult tasks when introducing CAD was to promote understanding among the drawing office staff and eliminate the natural fear of the unknown. Now the majority of people are trained, CAD drawings are commonplace and there is, generally a better appreciation of the role CAD can play."

Mr Jackson stresses that his company has found that the quality, consistency and accuracy of drawing work by CAD has been outstanding by any standard. The operator, as he becomes experienced, can concentrate on the engineering detail of the work with the ability to edit quickly to reach first class presentation.

Max Commander



MANUFACTURING AUTOMATION IV

New developments in flexible manufacturing systems.

Efficiency in small batches is the goal

Palletised vehicle components passing down a central conveyor of the Gardner manufacturing system.

THE AIM of the flexible manufacturing system is to enable a company to produce small batch quantities of different components as efficiently as if it were using mass production methods.

In its ultimate manifestation, it could be called the "factory of the future" or the "unmanned factory," where the entire plant is driven from the order book.

In an idealised unmanned factory an order arives and is fed into the central computer system which generates the necessary instructions for the computer-aided drawing office to design the parts. It tells the computer-aided warehousing system to withdraw the necessary raw material from the store and gives instructions for "cells" (groups) of computer-controlled machine tools served by robots to carry out the actual machining.

Such a sophisticated system probably does not exist anywhere in the world. A number of companies have installed systems which come close to the ideal but as Mr Jan Carlsson, secretary of the Computers and Electronics Commission of the Swedish Ministry of Industry, points out: "There are at most 220 FMS in the world and 70 of them are in Japan."

Mr Carlsson and his commission have recently carried out a study of robotics and computer aided design and manufacture (CAD/CAM) for the Swedish Government. Their conclusion was unequivocal: "Given the economic problems that most industrialised countries now face, productivity improvement is a main target of industrial policies.

"For this reason, Sweden and other countries have given high priority to the promotion and development and diffusion of industrial robotics and computer-aided design and manufatcuring technology."

The fruits of that priority are now clearly to be seen in Scandinavia, in the U.S., in Japan and increasingly in Europe. Even in the UK, traditionally a laggard in the introduction of advanced manufacturing technology, the picture is not as black as it was two years ago.

Professor Robert Bell, head of the department of manufacturing technology at Loughborough University, told a conference in 1981: "The flexible manufacturing system represents the most readily achieved form of advanced manufacturing system for British industry."

Now he believes FMS is beginning to happen in Britain: "The level of performance of the major Japanese companies has resolved the debate over whether we need this technology or not."

FMS is hardly a new idea, and at one time the UK was well to the fore in the development of these systems. Old machine tool hands remember the Molins System 24, designed by a genius from Ferranti, Mr Theo Williamson.

Mr A. A. Lodge, general manager of Cincinnati Milacron Electronic Systems Division and formerly chairman of the Numerical Engineering Society, worked with Mr Williamson.

"He took the view that machine tools should work 24 hours a day, while humans should work only eight. The System 24 went a very long way down the road to flexible manufacturing. First, and most important, it was driven by the order book. Orders were fed into the IBM mainframe which controlled the system and the computer produced the production schedule.

Too costly

"The system comprised four profilers and two drillers linked together with automatic pallet loading and unloading and served by "Moleks" a kind of Molens Dalek, which moved materials about the plant.

"Some 24 were built from 1965 on. In my view, they were too small, too directed to light alloy and cost Molins too much money to develop.

"But that was the trouble with Theo Williamson—he was always 15 years ahead of his time."

What happened in those 15 years which made Theo Williamson's dream a commercial reality was cheap microelectronics. The System 24 was computer managed but the machine controllers were simply not up to the ambitions of the architect.

Now it is possible to step on to the shop floor in Volvo's truck manufacturing plant in Västeras, Sweden, and see a cell of five different machine tools carrying out operations simultaneously on the same type of part and fed by a central Unimation robot. Unmachined parts are brought to the cell and machined parts moved on by virtually noiseless nylon belts.

The list of suppliers of FMS is neither so long nor as coherent as that of conventional numerically controlled and computer numerically controlled machine tools. The systems are often put together on a "mix and match" basis more akin to consultancy.

In the U.S. the leaders include Cincinnati Milacron and Sunstrand; there is evidence that although there are pockets of advanced work, companies in the U.S. are being slow to take on advanced manufacturing techniques. Mr Lamont Jenkins, a former president of the Numerical Control Society in the U.S., said that only 3,000 U.S. companies were implementing CAD/CAM technologies out of some 30,000 with the potential to use it.

In Japan, the leading companies include Yamazaki and Hitachi-Seiki; Yamazaki has raised considerable interest recently with the commissioning of a factory based on FMS techniques which manufactures machine tools: "It is cannibalism in reverse," according to one senior consultant.

Fujitsu Fanuc, the world's largest manufacturer of machine tool controllers has a factory in the shadow of Mount Fuji where industrial robots, controlled by computers create other industrial robots.

In Scandinavia, companies like ASEA and Swedish Machine Tools are working towards completely flexible manufacturing systems. The Swedish approach raises an interesting point of philosophy.

ASEA is developing robots of the most sophisticated design, able to follow the line of a seam or assemble a part and act as the service link in a FMS cell. Swedish Machine Tools (present in the UK as SMT-Pulmax) has developed a computerised part changer which provides for the fully automatic exchange of parts on its Swedturn lathes. It may seem purely semantics, but some manufacturing consultants believe that robots are too expensive and sophisticated for the shop floor and that there is a brighter future for computerised part changing. The consensus, however, is that both technologies have a part to play in the factory of the future.

In the UK, FMS systems have been proposed or installed by Kearney and Trecker Marwin (KTM) of Brighton, Cincinnati Milacron (UK), Giddings and Lewis and Taylor Hitec/Tube Investments Machine Tools (going under the name of Mechtronics) and 600 Group. GEC is represented by Factory Automated Systems Technology (FAST).

Everybody is agreed that while the Japanese are far ahead in the use of FMS (although not in the technology itself) there is little to choose now between the U.S. and Europe in manufacturing sophistication. The U.S. uses automation on a bigger scale—the level of technology and the way in which it is used seems to be on a par. While the motor manufactures are the biggest users of robots, the best-known of the UK FMS users is Normalair Garrett. It has a 25,000 sq ft advanced manufacturing facility at Crewkerne, Somerset.

It is not as advanced as the £4.5m facility at the Barton Hall engine works of L. Gardner and Sons (both, incidentally are KTM installations), but it has been in operation for over 12 months and Mr Kenneth Wills, Normalair Garretts's manufacturing director, has been able to quantify the benefits of the system. Normalair claims the system is run by 11 people on two shifts, making complex prismatic parts for Tornado aircraft ejector release units.

Reduction

Labour costs are now £148,000 a year against £400,000; operator output has risen threefold and stock and work in progress is turned over 24 times a year instead of 3.3 *with a corresponding reduction in value held at any one time from £690,000 to £90,000.*

These figures have the near magical quality that has come to be expected of Japanese production performance; they are confirmed by figures from other countries. Volvo uses 20 per cent less working capital with flexible manufacturing—saving interest charges of SKr 900m (about £90m).

Sophisticated machinery alone, however, will not bring about magical cost benefits. Everybody is agreed that success is based on basic overall organisation for manufacturing. Mr John Puttick, head of PA Management Consultants Manufacturing Division warns of the danger of slavishly copying the Japanese: "Miniscule inventories, Kanban, robots and so on are only effective when applied in harmony with an appropriate competitive strategy."

Alan Cane

Flexible production line speeds the flow in advanced vehicle plant.

French system sets the pace

THE FACTORY is recognisably an engineering works. There are machines, enormous drills, a few rough castings waiting for attention, and plenty of action going on around the large-scale equipment.

But in every other way, a walk around the Renault Vehicules Industriels (RVI) plant at Boutheon is to take a step into the future. This is France's most advanced, fully operational flexible factory, and it works in a way which marks a crucial break with the methods that have turned the motor industry into the giant it has become today.

To one side of the plant is a raised dais, encased in glass. Inside sits a man, surrounded by controls and television screens, calmly checking the computer read-outs that show him if the plant is working correctly.

Down below, on the 3,000 sq m compound, there is only a handful of workers. The main movement comes from a group of chariots, gliding effortlessly from machine to machine as the parts they carry are gradually drilled and shaped to the requirements of the system.

To the causual eye it looks as if all these movements are pre-ordained in some infinitely repeatable pattern.

As the chariots slip silently around, they appear to be doing the job of a standard transfer line. But in fact, the chariots perfom a variable waltz, subtly varying their directions according to the commands of the computer.

These variations lie at the heart of the system, and they explain why the plant is causing a revolution in methods.

When Renault Vehicules Industriels came to design the Boutheon factory, it had the choice of installing a traditional automated production line system. The plant makes gearboxes for heavy lorries, and this particular machine shop was designated for the drilling and preparation of the heavy gearbox cases for a new range of gears. Four different parts needed to be machined.

NUMBER OF ROBOTS IN SOME MAJOR CAR MANUFACTURERS

Mainly for spot welding car body assemblies; figures for 1981, unless otherwise stated.

Britain	BL	37
U.S.	Ford	More than 300
	Chrysler	160
Japan	Nissan (Datsun)	300
	Toyo Kogyo (Mazda)	50
	Toyota	200 *(planned to increase to 920 by March 1983)*
Sweden	Volvo	58 (1977)
Italy	Fiat	300 (1979)
France	Renault	30 (1977)

Source: British Robot Association.

In a traditional workshop, the four separate bits of the casing would have required four different automated production lines. The parts are not identical and could not be put through the same processes.

With the initial output of only 40 a day, rising to a target of 70 and possibly 100 later, RVI was being asked to tie up a lot of money in the different production lines which could be only used for the one specific product throughout their working life.

The flexible factory system allows RVI to escape these constraints in using only one production facility for all four casings. Instead of being moved around the factory on standard transfer lines, designed for standard parts, these are taken to and from the workposts by the chariots.

There are seven of these different machining centres, and they are each capable of recognising the different parts presented to them. They drill and trim the cases according to the special, parameters of the four different designs.

The only direct human intervention in this process comes in the initial loading of the chariots. Two men select the casings according to instructions from the central computer. All the other of the 15 workers in the plant, now producing at the rate of 40 entire cases a day, are working on maintenance.

Breakdowns

At the centre of this the computer, controlling the movements of the chariots and constantly checking the flow of work on the casings. To a certain extent it can even cope with breakdowns, making the trolleys circumvent a machine that is not working to keep the components moving through the plant as quickly as possible. The computer also performs a crucial function in optimising the work flow, choosing the parts to be machined and the machines to work on them in order to keep the maximum number of cases moving through the plant. This facility means an important breakthrough on stock costs, an area in which European plants perform consistently worse than Japanese.

RVI says that in giving the contract to build the plant to the group's machine tool subsidiary, it set out three basic demands. It wanted the workshop to be adaptable to different volume throughputs. It also wanted it to be able to adapt to different types of product or certain modifications in the existing ones; and it wanted the plant to be capable of swift adaptation between different products in order to cut stock holding to a minimum. It also insisted that the solution should be competitive with traditional system in both the investment requirement and depreciation.

The group says that all of these criteria have been met. First, on the volume question, it is already planning to step up production from 70 units a day to 100, and says that further expansion is possible.

Secondly, it has already modified the system considerably during the planning stage, and is planning two new variants in the machining of the current parts. A further new part will be introduced later, it says.

Thirdly, on the stock management issue, it says that the current four casings are being machined without any time being taken up to change and reset the machines. When a further gearbox is introduced, it believes that the entirely different type of casings will be capable of being accommodated in the machines with only a four hour wait for resetting.

The company adds other advantages. The plant adjusts particularly well, for example, to breakdowns, allowing work to continue, if at a slower pace when traditional lines would be at a standstill. It also allows a high level of productivity because the machines are extremely adaptable and are programmed for optimum use by the computer.

Because of this high degree of productivity RVI believes that it will recoup any extra building costs — investments amounted to FFr 45m—compared with the conventional systems. Running costs are also slightly lower, with the workforce expenses roughly the same, and an important gain on stocks.

Terry Dodsworth

Mark Webster reviews the march of the robots, where a market of £2bn is forecast for the end of this decade

Key devices manning the production lines

THE WORLD market for industrial robots has the feel of another Gold Rush about it. Everyone, from giant multinationals to small specialist companies, is trying to secure a place in the computer-led manufacturing revolution in which robotics will play a key part.

But like the thousands who panned patiently for a few specks of gold dust, experts believe that many of the hopefuls in the field of robotics are likely to be disappointed.

"There is no question that robots are here to stay," said Mr Tom Brock, executive secretary of the British Robot Association. "But at the moment, many companies want part of the action and when they see that the action is not all that big they may wonder if it's worth being in the business after all."

Despite the recession, the robotics market has been growing steadily in the past few years. One estimate is that it will carry on growing by a compound annual rate of more than 50 per cent, reaching $763m by 1986 and touching $2bn by the end of the decade.

Even with that sort of growth the market cannot accommodate all the aspiring robot makers. Everyone in the business expects the next few years to be crucial in deciding the eventual shape of the market, especially with the anticipated arrival of the Japanese as a major force in the export market from 1983/84 onwards.

Broadly, one of two things could happen. Either the giants, such as IBM, Westinghouse and Texas Instruments which are currently sniffing at the market, decide that there is not the volume business to support their involvement; or the smaller companies exclusively in the robotics business are crushed by the weight of the development costs in the robotics business.

Until the expected shake-out comes, it is very difficult to trace any clear definitions in the world robotics market. Even the word itself is subject to debate. It comes from the Czech word "robata" meaning drudgery or servitude and has been a very broad interpretation by the Japanese and the French who include many simple manipulators.

Perhaps the clearest definition comes from the British Robot Association—"a programmable device designed both to manipulate and transport parts, tools or specialised manufacturing implements through variable programmed motions for the performance of specific manufacturing tasks."

On that basis, the automotive industry is by far the largest user of robots with more than 50 per cent of those installed. Most of the world's major car makers have installed robots. Some, like Renault in France and Volkswagen in West Germany, have developed their own range of robots and have started to sell them to other industries and other car makers.

Renault's wholly owned robot subsidiary, Acma, had produced more than 350 robots to the beginning of this year of which 70 per cent were for in-house use, 10 per cent have been sold to other French car manufacturers, 10 per cent to foreign car makers and the remainder to other industries.

The company points out: "The great advantage of the robots is that they replace automatic machines which lack flexibility. Instead of a machine which is capable of only one task, we have a robot which can handle three or four programmes."

At the company's Douai plant where more than 100 robots are working on soldering, painting and materials handling they can cope with changes in models. Both the Renault 9 and 14 run on the same production line and the robot can identify them by reading a magnetic strip. Renault is experimenting with other ways of increasing flexibility including sensory devices for the recognition of different parts.

Britain's BL has a total of 50 robots on its production lines, the bulk of them Unimate robots being used for spot welding at the Longbridge plant on the Mini Metro. BL's main problem is that the robots are only capable of handling the Metro.

"There is some flexibility, but basically the line is constructed to handle only the Metro," said a BL spokesman. "We are looking now for automated systems including robots which can handle a whole range of models in different shapes and sizes."

Overall, BL is pleased with its robots." At Longbridge, the efficiency levels are more than we expected. But then the robotics and the technology is just one part of the story. The rest has been educating the people who have to work with them and helping them to get the most out of the system."

The pressure on the motor companies comes largely from their main competitors, the Japanese, who have gone further than any other nation in the application of robotics. Of an estimated world population of around 25,000, the Japanese have more than 10,000 on the basis of the British Robot Association definition. The U.S. comes next with 5,000.

League table

But the world market is far from clear. No one is prepared to compile a league table of manufacturers saying that the difficulty in defining a robot makes it impossible. But there is broad agreement that any such table would include the Japanese big four—Mitsubishi, Fujitsu-Fanuc, Hitachi and Seiko—along with at least two U.S. robot makers Unimation and Cincinatti-Milacron.

The European market is a patchwork of licensing agreements, direct foreign involvement and nascent indigenous industries. In terms of installations West Germany leads the field with some 2,500 robots by the end of last year, followed by Sweden with 1,800, the UK with 713, France with 600 and Italy with 500.

The markets within those countries vary enormously. Italy, for example, has the vast majority of its robots in only three companies—Olivetti, Fiat and Alfa Romeo—while the British have a much wider spread of more than 100 different companies in many sectors using robots.

Until now, robots have been used largely for simple, repetitive tasks, ofte nin unpleasant conditions which might be hazardous to human beings. They can be used for spot and arc welding, surface treatment, machine toll loading and unloading, die casting, foundry work or general handling.

But one of the areas in which they are expected to expand fastest is in assembly. Already, General Electric, Westinghouse, Texas Instruments, IBM, Siemens and RCA are evaluating robots for assembly work. It has been estimated that 50 per cent of production time in manufacturing industry is assembly work and 95 per cent of that time is lost in handling.

Robots could be used to speed-up processes considerably but they will need some of the human skills of manipulation, precision, gripping and sensing before they can carry out their tasks effectively. In order to do so, a number of companies are developing sensing devices, some using cameras, but the cost has so far ruled out practical applications.

The Japanese Industrial Robot Association has already identified more than 100 manufactured products which could be assembled by robots with vision capabilities including pumps, compressors and domestic appliances. Robot users believe that what is necessary now is a better dialogue between them and the robot makers to agree on what sort of robot is needed in the future.

One of the most pressing needs, according to the users, is the development of complete manufacturing systems. By the time the system is installed with the necessary ancillary equipment, the robot might only account for 30 to 40 per cent of the cost.

To help the manufacturer select from an increasingly bewildering array of robots and equipment, specialised consultancies have begun to spring up which can handle the systems requirements of robot purchasers and more are likely to emerge.

In Britain, for example, the Department of Industry has compiled a list of approved consultants who will carry out a variety of tasks from a simple factory inspection to see if a robot can help the production, to a full scale design study on how the system can be implemented and who could supply the necessary equipment.

Companies which have adopted robots have done so for four essential reasons; improved productivity and efficiency, better product quality and consistency, the elimination of hazardous work and overcoming problems of labour shortages.

In some countries like Sweden and Japan which have followed the most progressive line on robots, the workforce has tended to support, even press for the use of robots because they can relieve much of the tedium of the production line.

REASONS FOR ROBOT SUCCESS IN SOME MAJOR APPLICATIONS

- **Spot welding** — Process suits robot repeatability and accuracy; heavy and unpleasant task for human operator; line installations work well under central control; high quality and consistency, e.g., improved weld patterns; continuous shift work possible; flexibility for model changes and variations; shortage of skilled welders/high labour costs.
- **Spray painting/coating** — Unpleasant environment for human operators, so fewer human problems; reduced labour costs; fewer rejects and high quality; raw material (paint/underseal, etc.) savings; health and safety regulations.
- **Die casting** — Improved speed, accuracy, capacity and safety; shortage of workers prepared to work in the environment; unpleasant working conditions/health and safety considerations; better utilization of capital equipment.
- **Injection moulding** — Better performance on large moulds than humans can perform; other tasks possible such as trimming, loading inserts, etc.; noxious environment; boring work; better utilization of capital environment.
- **Machine loading/unloading** — Helps to reduce dead handling time; shortage of skilled labour/high wage rates; increases productivity of equipment; speeds up production time; good compatibility with NC technology; many processes (changing patterns but high level of repetition) ideal for robotization.
- **General handling/ (palletizing, stacking, packing, etc.)** — Repetitive, boring and sometimes heavy work for human operators; safety considerations with hazardous materials; improved handling of delicate materials, e.g., sheet glass, TV tubes; continuous operation, easy to run.

Source: Creative Strategies International

UK applications quoted by major robot manufacturers

	ASEA	Cincinnati Milacron	GKN Lincoln Electric	Hall Automation	Trallfa	Unimation
Paint spraying				★	★	★
Spot welding	★	★			★	
Arc welding	★	★	★	★	★	★
Machine tools	★	★		★		★
Diecasting	★			★		★
Injection moulding	★			★		★
Process machining	★	★				★
Assembly						★
General handling	★	★	★	★		★

Source: Inbucon from trade data.

WORLD ROBOT POPULATION

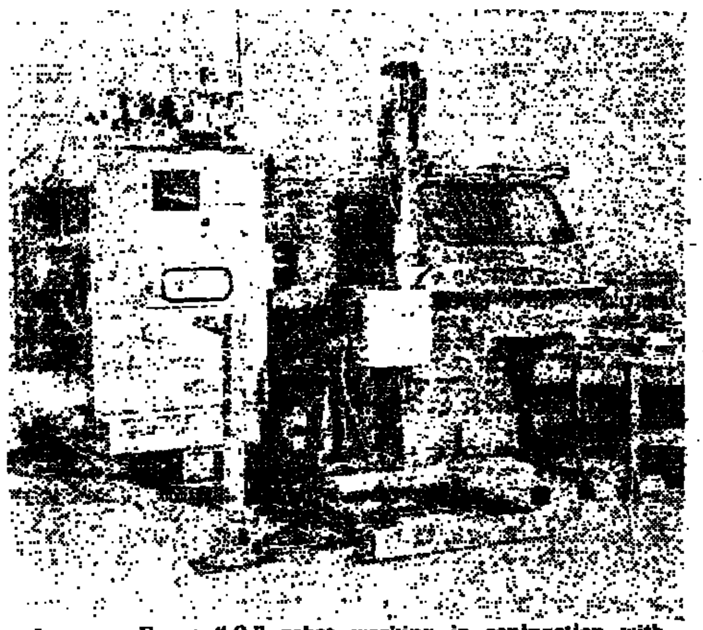
Japan	10,000
U.S.	5,000
West Germany	2,300
Sweden	1,700
Britain	713
France	600
Italy	450
Others	1,500

Source: British Robot Association

ORIGIN OF ROBOTS IN USE IN BRITAIN

Japan	54
Britain	186
Europe	258
U.S.	215
Total	713

Source: British Robot Association



Japanese Fanuc "0" robot working in conjunction with a Hitachi-Seiki 4NE-600 CNC turning machine. There are increasing applications in general manufacturing and sub-contract machine shops for this type of equipment.

WESTERN EUROPEAN ROBOT SALES

	Units	$m
1981	1,700	96.0
1982	2,516	166.0
1983	3,270	224.8
1984	4,251	309.6
1985	6,291	558.6
1986	8,178	763.2
Total	26,206	2,118.2

ROBOT INSTALLATIONS

Percentage forecasts, Western Europe

	1981	1983	1986
Pick-and-place	55	33	22
Sophisticated robots	37	45	42
Sensor-based robots	—	2	11
Assembly robots (with or without sensor systems)	8	20	25

Source: Creative Strategies International

Rhys David highlights the benefits that have come to a relatively small company since it became one of the largest users of robots in Britain

Vital key to streamlined productivity

IT HAS not been the best of years for the manufacturers of lawn mowers, a breed of men that spends the spring praying for the climatic combination of rain and warmth which will produce maximum grass growth.

This year an unusually hot and dry early summer throughout Northern Europe — where the public tends to care about its lawns—stunted growth and suppressed the lawn mower replacement urge. More recently, monsoon-like weather has ruled out most gardening activity anyway.

It was the vagaries of the lawn mower market, not to mention the strong competition within it, which persuaded Flymo, the UK subsidiary of the Swedish Electrolux group, that continuing improvements in productivity would need to have priority if it was to survive and grow. And this, in turn, set the company on the path to becoming—in spite of its relatively small size—one of the biggest UK users of robots.

The butt of the "less bovver than a hover" advertising campaign (mounted several years ago by a rival), Flymo has about 35 per cent of the UK market of 1.4m power motors a year—a not inconsiderable achievement for a rather unusual product which has brought the air cushion technology of the hovercraft to bear on the problem of cutting grass.

In addition to its 500,000 UK sales, Flymo also exports 200,000 mowers annually, mainly to the Continent, as well as making various other products and components for the parent group.

The first in the series of steps which the company has undertaken to improve efficiency, culminating in the purchase of the present 23 robots, was a complete reorganisation of work patterns at the main Newton Aycliffe factory in the North-East of England.

Under the previous production line system, problems arose every time work had to be rebalanced when different products were introduced to meet variations in market demand, says Mr William Palmer, the manufacturing director.

The pressure, inevitably, would be for the lines to be run at the rate suited to the slowest operator. Moreover, by the time new arrangements had been worked out the market might well have changed again and a different product might have to be put in requiring a further rebalancing of lines.

Stock-holding

The solution has been a change, during a four- to five-year period, to a module system with one worker being responsible for all the assembly tasks on a particular product. Stock-holding has been reorganised to ensure each individual has a readily-available supply of all the various parts needed, as well as additional tooling installed.

Quality control — previously carried out by inspectors — is now handled by an automatic station, through which the products are shunted. The savings have been dramatic with assembly now taking 35-40 per cent of the time previously needed, enabling Flymo to continue to under-price most of its rivals.

The plant's robots—the second stage in the drive for higher productivity—have been brought in at an earlier point in the production process, mainly to serve machines producing parts for assembly.

Components for lawn mowers (and for vacuum cleaners, another Newton Aycliffe product) need a high standard of finish, free of scratches, and for this reason cannot simply be expelled from plastic moulding machines on to conveyors. A total of 19 robots are therefore engaged inside the modern factory buildings in the task of lifting the finished part from the moulding machine and transferring it to a holding area.

The installation consists of British-made Mouldmates from Mouldmation, a relatively simple pick-and-place robot, and of fully re-programmable materials-handling units (MHUs) from Electrolux (which earlier this year sold its robot division to another Swedish group, ASEA).

Flymo also has two highly sophisticated American-made Unimation Pumas. One of these works in tandem with a MHU which lifts lawn mower handles from a bending machine and passes them to a plastic coater.

The Puma takes the handles from the plastic coating machine and loads them on to an offtake rail, and after further development work will load the parts directly on to a conveyor.

Mr Bill Palmer, manufacturing director of Flymo, seen with one of his family of robots—"automating this task has helped to maximise output from the capital-intensive injection moulding equipment," he says. For employees, the installation of robots has eliminated hot, boring and repetitive work, such as unloading Flymo air-cushion lawnmower hoods from automatic moulding machines

The second Puma is engaged on assembly—one of the few such operations currently being managed by robots in Britain. It takes a complete lawn mower motor and builds on to it ten different parts, including fan and blades. The motor is then ready to be placed in its housing.

Delivery of a further seven MHUs—to be employed on various handling tasks—has now begun.

The cost of the MHUs has worked out at around £14,000-£15,000 for the basic model, though engineering them in-house to carry out the required tasks can add a further 50 per cent.

The payback is relatively rapid, however—no more than a year. The other great virtue of the robot, Mr Palmer observes, is consistency. In the short-term, a good operator can out-perform a robot but will have difficulty going on doing so.

Among the 700 employees at the plant, reaction to the introduction of robots has been favourable.

"The union can see we are investing for the future and that by reducing our costs we are managing to expand our market share and maintain employment," Mr Palmer points out.

In 1976, the company was producing only 150,000 mowers a year and taking 11 per cent of the market. Further growth is expected beyond present levels of output as markets on the Continent become more familiar with the hover grass-cutting principle.

Fully tested

At Flymo, efforts were also made to ensure robots were not introduced into working situations before they had been fully tested.

"When we introduced the first one, we built a complete dummy injection moulding rig, away from the production lines. The machine spent three months picking up a lawn mower hood, moving it to a new station and placing it down.

"We did not want to put it on a live moulding machine before the process had been debugged because this might have discredited it," Mr Palmer observes. A similar period of training has been set for the robot now working on motor assembly.

Assembly is likely, in fact, to be the next big area for robots to tackle at Flymo, again as part of a wider re-organisation aimed at increasing efficiency and lowering costs. The plant makes many of the plastic components used in its lawn mowers and other products in-house, but these are then stocked and have to be called up again and brought together for assembly.

The next step is likely to be the linking of the plastic moulding lines—where much of the handling is already robotised—with assembly, eliminating internal storage, handling and paper work.

As a further stage, products will be designed with automated assembly in mind, though there are obvious dangers. Mr Palmer admits that the assembly tail could end up wagging the finished product dog—"there will obviously have to be close liaison with marketing to achieve the right balance between lowest costs of production and the features the finished products should have," he adds.

At consumer level, the robot that many Flymo purchasers would consider most useful would be one that collects the cuttings left behind by the hover mowing technique. The company has tackled that particular problem, however, another way, in line with its belief that where other, more simple solutions are available they should be used.

After a lot of research effort into fan design and air flow—much of it with universities—the company is now offering machines that can blow the cuttings into a collection box.

Important obstacles have still to be surmounted in the robotics field, according to Unimation, a major equipment supplier.

Overcoming the limitations

UNIMATION, the American-owned industrial robots manufacturer which has a growing presence in the UK, is expected to launch a fully computer-aided design (CAD) compatible version of its Puma Robot towards the end of this year.

The company, which has experienced strong growth in demand in both the U.S. and Europe, believes that advances in manufacturing automation will eventually mean much wider use of robotics but points out that there are still a number of obstacles to be surmounted.

Robots and machine tools have to communicate in an integrated manufacturing system but the electrical interfaces between these devices are rarely standard.

Based in Telford, Shropshire, Unimation has developed a system whereby its robots can electronically recognise their own idiosyncrasies and make the appropriate adjustment automatically, thus adding to their flexibility and ability to be integrated into manufacturing systems.

Unimation which uses 96 per cent UK-sourced components, for its UK built products has recently noticed a far more knowledgeable approach by potential customers in Britain who are increasingly aware of the capability and limitations of robots.

"Companies are seeing the application of robotics more in terms of manufacturing systems rather than as an answer to a particular problem. Production engineering consultants are also playing an important part in this," says Mr David West of Unimation.

However, around 60 per cent of the company's sales in the UK are for one or two robots, indicating a wide variety of users within industry, and this is welcomed on the basis that the market is developing across a broad spectrum.

The Telford plant is now producing around 15 machines a month, of which slightly more than half are sold in the UK and the rest are exported to the Continent. The workforce has increased from 25 in 1976 to more than 100 and reliance on the U.S. parent has been virtually eliminated apart from some research and development work.

The next significant step, Unimation believes, is in the area of vision and tactile sense and its latest model has an inbuilt capability to use the additional tools when available. "We are ready for these ancillary technologies to catch up with us" Mr West claims, pointing out that they are now feasible but uneconomic because of their high costs. "One can teach a blind man to do a lot of things" he adds, indicating that conventional robots have a long way to go in terms of capability.

He believes that companies using or thinking of using robots should do more research into product handling since it may be counter-productive to lose the orientation of a component after it has been handled by a robot by merely throwing it into a bin.

Wide interest

Although Unimation is unwilling to indicate which sectors of industry are introducing robotics fastest — apart from the more obvious ones such as motor manufacturing—it seems there is far wider interest than is generally realised. Significantly, the company says that the range of its British customers is wider than those in the U.S.

An important aspect of Unimation's work at Telford is in its newly launched systems division, which was seen as necessary to provide ancillary packages for particular robot applications. A number of independent companies are also springing up to provide this kind of service, a trend welcomed by Unimation on the basis that it stimulates additional business. But it believes that the technology involved had limited the capabilities of smaller concerns.

Unimation makes no predictions about sales but points out that it took 10 years up until 1972 to sell its first 500 robots, whereas the same number has been sold recently in only 2½ years.

The basic cost of a Puma robot is now around £23,000 but the inclusion of a package of related equipment can increase it substantially; one recent sale, amounted to £125,000, although this was regarded as unusually high.

Lorne Barling

Paul Betts reports on the deluge of new ventures in America's robotics industry

U.S. equipment suppliers rush to win market foothold

THE ROBOT has come of age in America. In recent months, an impressive cast of American corporate giants have announced a deluge of new ventures in the nascent robotics industry.

General Electric, Westinghouse, Bendix, United Technologies, General Motors are all scrambling to position themselves in a market which is expected to grow into a multi-billion dollar business by the end of the decade. And now, even more significantly, IBM, the world's dominant computer company, has become the first computer company to enter the field.

"When IBM does something like this, it rings a big bell and the business take on a whole new meaning," says Mr Peter Wright, an analyst with the Connecticut-based Gartner group.

"The move is probably more significant for the industry than for IBM's bottom line. As the first computer company to announce a robotics system, IBM is likely to propel the industry to take a new look at robotics."

The computer giant announced its entry into the fledgling industry at the end of February with a one-arm relatively low-cost programmable robotic system that is linked to IBM's recently introduced personal computer and which will become available in the market towards the end of this year. Moreover, IBM also said it is expanding marketing tests of a more *sophisticated* robotic system called the IBM RS-1.

Some American manufacturers and distributors of programmable robots

	Servo controlled: Point to point	Servo controlled: Continuous path	Non servo: General purpose	Non servo: Diecasting
Advanced Robotics	★			
AMF	★			
ASEA	★	★	★	★
Automated parts removers				★
Automation			★	
Automatix	★			
Auto-place				
Binks		★		
Cincinnati Milacron	★	★		
Cybotech	★			
De Vibiss		★		
Cosmetics			★	
General Electric	★			
General Numeric	★			
Industrial Automates			★	
Modular Machine			★	
Nordson		★		
Prab Conveyers			★	★
Production Automation	★			
Rimrock				★
Seiko			★	
Sterling Detroit				★
Unimation	★	★		

Source: Inbucon Productivity Services.

Wide applications

The two IBM robots are general purpose systems offering a wide range of applications for the manufacturing sector ranging from precision assembly to electronic parts insertion, packing, unloading and loading. The robots have some interesting features. IBM boasts that its AML language is unique in that it enables the robot to recalibrate itself automatically. The larger robot also comes with optical and tactile sensors which monitor the robot's operations.

But it is not so much the technological feats these robots perform that have surprised the industry. It is the decision to move swiftly that has impressed even the most seasoned IBM watcher. Twenty years ago, IBM was slow to react to a phenomenon which was to sweep through the entire electronics industry: the microcomputer. The company's failure to enter quickly the fast-growing minicomputer market allowing a new generation of computer upstarts, in particular the Digital Equipment Corporation, to gain a dominant share of the field is regarded as one of the biggest mistakes that IBM has ever made. IBM clearly does not want to make the same error again.

For some time, computer companies have been expected to enter the robotics market. Although robots have been around for a good 20 years, the first generation of hulking, big contraptions have been replaced by a new breed of smaller, more sophisticated robots controlled by microprocessor brains and camera eyes. The robot, after all, is a computer with mechanical arms and gripper hands. It was thus simply a question of time before a computer company announced its own line of robots.

IBM had been dappling with robots for several years. Its RS-1 system is the fruit of 10 years of research, the company says. But to come to market ahead of the pack, IBM turned to a Japanese manufacturer, Sankyo Seiki, to build its low cost IBM 7535 robotic system.

This reflects a significant change in the way IBM now does business. As Mr Wright of the Gartner group put it: "IBM in the past has never sold products that it doesn't actually manufacture. But the company has become increasingly flexible and has been turning to outside companies in recent months."

Indeed, IBM last year started selling a low-cost copier made by Minolta of Japan. Its personal computer introduced last summer contains several products made by other manufacturers. "By turning to outside vendors, this expedites the time for IBM to bring products to market," Mr Wright adds. "It also reduces the risks as the company presses ahead with its own in house research and manufacturing efforts."

But why the hurry? The American robots market is still, in annual sales at least, small potatoes. It has nonetheless grown steadily from \$35.5m in 1978, to \$60m the following year, to \$100m in 1980, and to \$155m last year. It is expected to grow to \$215m this year, despite the current economic slowdown which has had a severe impact on the capital spending plans of American manufacturing companies.

The real stakes are not so much in robots but in the whole computer-aided design (CAM) and computer-aided manufacturing (CAM) industry.

"IBM clearly wants to position itself as a leader in the computer-aided manufacturing game," says Laura Conigliaro, who follows the robotics industry for the Wall Street securities firm of Bacha Halsey Stuart Shields.

Mr Wright of the Gartner group says that "with its low cost robotics system, IBM is bringing its personal computer not only into the office and the home but also in the factory."

IBM's move into robotics, which, according to Mr Conigliaro gives credibility to the infant industry, will help IBM maintain a position of leadership in this new market by establishing an early foothold and presence before competitors such as Texas Instruments and Digital Equipment (both believed to be working on robotics systems of their own) enter the fray. It also adds an entirely new dimension to the whole computer-aided manufacturing industry which will shape the automated factory of the future.

Three groups

With IBM entering the robotics market, the industry has now basically been split into three groups. At one end there is a computer industry (with many more poised to enter the market) which intends to capitalise on its computer technology to forge itself a major presence in the field of industrial automation of which robots are only one, albeit highly visible component.

At the other end there are the traditional machine tool manufacturers which have long dominated the robotics market in the U.S. These include Condec Corporation's Unimation Division which had sales of more than \$55m last year and currently has about 39 per cent of the U.S. market and Cincinatti Milacron, the country's largest maker of machine tools, which had a 32 per cent share of the \$155m U.S. robot market last year. (In terms of the world market, the Japanese continue to be the dominant *robot manufacturers.*)

In the middle of the U.S. market, there are companies such as General Electric and Westinghouse which are proposing to offer the manufacturing sector *what* they call "complete solutions" to factory automation.

General Electric has made no secret it wants to become the leading supplier of automated factories.

"Our strategy is to become the number one integrator of factory automation and the number one solution producer," says Mr Alex Beavers, the manager of strategic planning and development for GE's industrial electronics business.

"Everything in the factory environment will be smart . . . the use of new computers in the factory environment will be the real pudding," he adds. And so, GE has embarked on a grand scheme to provide all the solutions required for total factory automation.

"Sitting in the middle we feel we have a strategic advantage with no vested interest in one computer hardware, for example," he says.

GE has already invested more than \$500m and intends to spend another \$250m in the industrial automation business.

The company has been assembling all the blocks during the past 18 months to become a dominant player in this market. Indeed, GE boldly says it expects to capture 20 per cent of the projected \$500m U.S. robotics market by 1986—"*and we are shooting for 30* per cent of a possible \$2bn North American market by 1990," according to a GE official.

To establish itself in the CAD business, GE acquired last year Calma in a deal worth up to \$170m. It also acquired Intersil for \$235m, a leader in complementary metal oxide semiconductor technology involving integrated circuits which can withstand heat and electrical distortion on the factory floor.

Last winter, it formed a joint venture with Structural Dynamics Research Corporation to add computer aided engineering to GE's mosaic of factory automation offerings. The cad/cam business alone, GE claims, is growing in the U.S. at an annual rate of 20 per cent and is expected to reach \$1.1bn by 1990.

GE is also in numerical controls, and is currently developing a new control it claims "will help us regain worldwide leadership with machine tool builders, perhaps even the Japanese," in programmable controllers, in *optoelectronics* (computer directed inspection systems that use solid state cameras for quality control and which will enable robots "to see"), and in a host of other areas connected with industrial automation.

In the specific field of robots, General Electric (which likes to say U.S. business faces three choices for the future—"automate, emigrate or evaporate," already offers 11 separate models including material handling, arc welding, spraying and other process robots. This follows a string of licensing agreements with the former axis powers: Italy, Japan and Germany. These manufacturing agreements involve the robot technology of the Italian Dea company, of Japan's Hitachi group, and just recently of Germany's Volkswagen company.

GE has also recently unveiled another important component in its factory automation strategy. The new product enables GE to "link the whole orchestra together . . . allowing electronic equipment to communicate." The new component, a communications network, called GEnet, ties together all the other pieces in GE's factory of the future.

The company, which turned to Italy, Japan and Germany to establish an early presence in the emerging robot market, also plans to introduce its own advanced robot in 1984.

With far less fanfare, Westinghouse Electric is approaching the factory automation market much along the lines of its traditional rival, GE.

Long-term aim

Mr Tony Massaro, the general manager of Westinghouse's Industry Automation Division, outlined at the Detroit Robotics Fair the company's long-term goal.

This, he said, "covers the entire spectrum of factory automation and includes: processing information through computer aid design, computer aided manufacturing and computer aided testing:- productive machinery including robots, machine tools and material handling equipment; and the communication links that connect these islands of automation."

Like GE, Westinghouse is making a major commitment in robotics. It is currently working with Carnegie-Mellon University in Pittsburgh to develop a new generation of robots with "artificial intelligence" giving them the ability to see, feel and (believe it or not) think.

It recently launched three robotic systems based on licensing agreements with Italian and Japanese robot manufacturers. The Westinghouse 5000 robot system is based on a robot made by Olivetti of Italy. This system is designed for high-speed, precision assembly of components.

Another system, the series 7000 adaptive welding robot, is based on technology from Komatsu of Japan. The third system, the so-called series 4000 precision pulsed welding robot, is also based on Japanese technology from Mitsubishi electric Corporation. Like GE and IBM for that matter Westinghouse has turned to foreign manufacturers to speed its entry in the market. It is also about to introduce two of its own robots this year bringing the Westinghouse family to five.

The company displayed two prototypes of its own two robots at the recent Detroit Fair: the series 1000 and 2000, as they are called, are compact parts-handling and asembly instruments.

With high rolling players such as IBM, GE and Westinghouse rushing into the market, there is already speculation of a "stars war" looming ahead in the robotics industry.

"There is considerable interest and speculation concerning the mushrooming number of companies entering the embryonic robot business," says Mr George Powch, who heads the robotics division of Bendix, the Detroit-based car component, machine tool and engineering concern. "And it is safe to assume that a shake-out is inevitable."

Bendix recently introduced two heavy duty general purpose robots for tool-handling applications, including machine tending, assembly and welding. Initially, the Detroit company is concentrating in the heavy manufacturing market.

Mr Powch warns there will be "considerable rationalisation occurring in the industry with a tendency to specialisation by application." Few companies, he claims, will have the capacity to cover all, let alone most of the bases.

United Technologies, for example, has so far approached robotics by concentarting on a specific market. The U.S. conglomerate owns a Dutch company called Steelweld Robotics which manufactures robotic equipment for several European car makers including, among others, Peugeot, Renald, Audi and Ford of Europe.

The company has now begun a major marketing drive to sell its robotic systems to North American car makers. It has signed a licensing agreement with a West German robot manufacturer, Nimak-Machinen Automation of Wissen, to extend its Dutch subsidiary's robot line.

MANUFACTURING AUTOMATION VIII

The impact of factory automation on jobs is insignificant so far, says **Ian Hargreaves**

Learning to live with the robots

CONSIDERING that the closest most workers have so far come to the world of automation is the workplace drinks machine, it is remarkable how much has been written about "the social effects" of this new technology.

A bibliography compiled by the Department of Employment on the subject already runs to 34 pages, with titles such as "When the robots take over — what's left?" — "The chips are down" and "Is a machine after your job?"

The "microelectronics monster" as Giles Merritt calls it in a book which surveys much of this academic sci-fi, is variously forecast to gobble up between a third and two thirds of the occupations around which our industrial and commercial society is formed.

Set against these epic exercises in guesswork, the reality of the employment impact of robots and other forms of factory automation so far are rather insignificant. Even if every robot in operation had claimed ten jobs—the most pessimistic analysis available — the loss of 250,000 or so jobs worldwide would hardly attract attention.

In any case, it is more likely that so far robots have created enough jobs in their own design and manufacture to offset the two to four jobs per robot more sober European analyses suggest have been displaced where they are used.

Few Luddites

The first thing that has to be said about labour's reaction to automation is that there is no evidence in the past ten years of significant resistance to technological change, as such, in the manufacturing sector. There may have been obstructiveness over terms, manning levels and demarcation, but very little of what is usually misnamed the Luddite spirit.

Behind this fundamental acceptance of technology, however, lie many different approaches.

In Britain, for example, much effort has gone into persuading unions to draft model "new technology agreements" as the basis for negotiations. There are probably between 100 and 200 such agreements at company level and a University of Aston survey of a sample of them suggested that about half are in engineering and that, significantly, nearly all of them are in areas organised by white-collar unions, such as offices or design departments.

Their clauses vary widely, from general statements of principle to detailed agreements on job security and remuneration. Most of them have appeared since 1979, when they were recommended by the TUC in its important statement Employment and Technology.

None of the agreements, however, has come close to the model envisaged, for example, by Tass, the white-collar section of the engineers' union. The Tass draft agreement states that acceptance of new technology should be accompanied by agreed progress towards eliminating systematic overtime and towards a 35-hour week.

In practice, Tass members, who are at the heart of the revolution in computer-aided design (CAD), have agreed in spite of their union's advice to establishing new regimes of systematic overtime and switches to two or three-shift working days in order to maximise the use of the new equipment and to increase computer access time. A recent deal with GEC Rectifiers, considered one of the union's more successful bargains because a demand for shifts was resisted, provided compensation of a weekly pay supplement of between £2.50 and £4.50 per person in return.

The fact that the white-collar unions are running faster than their manual counterparts is, however, causing some problems. The national council of the AUEW engineering workers section recently passed a resolution warning Tass off its territory and stating that machine tool operators should be given control of the programming of CNC machine tools as a right.

This principle was adopted at BL's Longbridge plant, but the war over control of computer tapes is far from over in Britain's engineering industry.

In most of British industry, however, new machinery, where it can be afforded, continues to arrive and be subject to negotiation in the traditional way. The trade union research unit of Ruskin College, in a study of four cases, three in manufacturing industry, found that management told the unions very little about their plans for technology and that when new machines were installed, negotiations tended to occur after the event with management playing upon the weakness of divided unions at a time when the recession has given management a whip hand in most collective bargaining.

Mr Tom Brook, executive secretary of the British Robot Association also tells horror stories of robot manufacturers being asked to makec landestine visits to the shopfloors of potential customers in order not to upset the workforce He agrees with the Ruskin Report and with every trade union federation in Europe that early consultation is essential to success

In those European countries where labour relations are more centralised and rigidly structured, more tangible progress has been made on new technology, especially on the establishment of codes of practice for the use of video display units.

The Scandinavian countries have also created a legal framework for their endeavours and in Norway and Sweden, employers contribute to the costs of "worker consultants," who advise the unions on complicated technological aspects of change. Sweden's system of co-determination has absorbed the component of technological change relatively easily.

In West Germany, the works councils which exist by law in all but the smallest firms, have taken on the role of discussing technological change, although as unemployment has bitten, there is some talk of dissatisfaction with a system which keeps discussion of technology in the consultative mechanism of the works council and outside the system of actual negotiations. IG Metall, the large metalworkers' union, also has an experimental, part-Government funded team of advisers on automation designed to assist local trade unionists with technology problems. This is part of the federal government's "humanisation of work" programme.

Acceptance

Few other countries can match the systematic approach of the Germans and Scandinavians, although in Italy, the 1979 round of contract negotiations produced sweeping acceptance of information disclosure clauses for over 6m workers. In France, there has been little more than talk.

In the U.S., where the early postwar years saw systematic opposition to automation by some unions, co-operation is now the order of the day and, chastened by foreign competition, robots have come to Detroit without even bringing significant financial compensations for members of the United Autoworkers Union.

In Japan, automation has been speeded along by a perceived shortage of skilled workers. Nor is there any sign of resistance to the high level of shift working which has accompanied this acceptance of technology. According to figures from the European Trade Union Institute, 37 per cent of Japanese manufacturing workers work shifts, against 22.3 per cent in Italy, 20.2 per cent in Germany, 19.5 per cent in France and 18.3 per cent in the UK.

For the individual worker, whether unionised or not, the advent of automation can mean a drastic change in the type of skills he requires (to "skills based upon analytic or logical ability rather than experience" in the words of John Evans of ETUI). Equally for some there is a definite de-skilling process which, the unions fear, will lead eventually to a polarisation between the highly-skilled jobs in the developed world and the mass, low-skilled work which will be farmed out to low-cost countries.

Whether these changes will lead to more or less job satisfaction depends upon how the mix of jobs is organised. At Olivetti, according to Mr Evans, technological change was used to negotiate a switch from flow-line to modular assembly, partly in order to make the hourly paid work more interesting.

For trade unions, the challenge is to pursue their traditional concerns of pay, job security and safety, while not losing sight of the broader opportunities to pursue grander objectives of more work sharing.

Their biggest problem is that in a world dogged by recession, when capital investment in new machines is constrained anyway, the unions suffer a loss of bargaining power. Where managements are exploiting this weakness by forcing in technological changes without dialogue there is obviously a danger that power shifts.

Even in Japan, according to Mr Joji Kato, deputy director of the Productivity Research Institute, harmonious relations over new technology would not survive a loss of economic growth. He also argues in a recent article that the advance of technology will increase pressure for more sophisticated forms of industrial democracy.

In Britain, perhaps because the blueprints for industrial democracy in the 1970s were over-ambitious, the evidence suggests that most of the lines of communication necessary for the smooth implementation of change have simply not been laid.

As John Evans says in a forthcoming paper: "new technology can be used to achieve a more egalitarian structure of industrial society or it can be used to increase centralisation and polarisation. The choice is a social and political one and it is not technological."

"World Out of Work" by Giles Merritt, Collins, £2.50: Draft of forthcoming ETUI paper and essay in Microelectronics and Society: For Better or Worse, by John Evans (Pergamon ed. Friedrichs and Schaff).

All change on the Metro line

BL IS one of Europe's largest users of robots and advanced automation systems and the Metro line at Longbridge is the showpiece of its effort.

Since production started in 1980, Longbridge has quite simply transformed its performance and is expected this year to produce 250,000 cars with 9,500 workers, compared with an output of 145,800 cars from 16,800 men in 1978. Absenteeism is down from over 12 per cent pre-Metro, to about 7 per cent now.

According to Mr James Donaghy, who is in charge of the Metro project, the foundation of success was a laborious exercise in consultation, training and joint planning which began over three years before the line started moving.

Although helped in the initial stages by the existence of a company-wide worker participation framework — since abandoned by the unions in protest at cut-backs —Mr Donaghy says the smooth, almost dispute-free performance of the Metro line demonstrates the fact that communication at the local level is well-established and has been unaffected by the collapse of the corporate framework.

That communication involves management allowing two weeks' consultation time —a week for talk between management and shop stewards and a second for consultations with operators whenever manning arrangements on the line are changed.

A team

From the outset, the Metro has benefited from, in effect, a team or module structure on the line, which was developed following visits by BL craftsmen to advanced factories in several European countries. These visits also helped create what is in effect, in spite of the jungle of union affiliations in the British engineering industry, an effective two-trade system on any part of the plant's operations. On the robots, for example, the engineering union (AUEW) and EPTU (Electricians' union) men work side by side as maintenance crews and men from either union are allowed to carry out the crucial re-programming activities. "There's no doubt that we are as good as the best in Europe," says Mr Donaghy.

In planning the project Mr Donaghy says management overestimated difficulties with the robots themselves, which like all the other automated systems on the Metro line are performing "beyond specifications."

He has, however, had more trouble with the computer control systems of the plant's overhead conveyors, which he feels have only been overcome because of the sophisticated software engineering back-up available from the BL Systems division. "Some suppliers promised more than they had the technical ability to back up," he says.

A revolution on the factory floor

CONTINUED FROM PAGE 1

machine tool control world."

The development of computer numerical control (CNC) was the major step forward. Earlier numerically-controlled (NC) systems, based on hard wired logic, were inflexible, difficult to program and of dubious reliability.

These NC machines were controlled by a punched tape; instructions for the movement of the drill head or cutting tool were coded into the tape and read by sensor incorporated into the machinery.

Modern CNC machines still retain the punched tape but only as a cheap and comparatively robust memory system—once the instructions on the tape hve been read into the memory of the CNC machine, the computer itself controls the operation of the machine tool.

This inherent computer power enables an extensive range of facilities to be provided which were not possible with hard-wired NC; linear and circular interpolation, switchable inch/metric read-out and programming, wide ranges of tool offsets, spindle speeds and feed rate over-rides.

Mr A. A. Lodge, formerly chairman of the numerical engineering society, points out: "The modern CNC system represents a much lower proportion of the overall machine tool cost than was the case with hard-wired systems.

"This fact, coupled with the vastly improved reliability resulting from developments in the electronics industry and the flexibility provided by manual data input and editing facilities is behind the explosion in CNC installations which has occurred over the past two or three years."

The armoury of numerically-controlled and "intelligent" machinery now available to the manufacturer includes NC and CNC lathes, cutting machines, boring, drilling and tapping machines; it includes machining centres, massive machine tools equipped with multiple tools to carry out a series of operations on all four faces of a casting and computer controlled part changing; and it includes the machining "cell," the basic unit of the flexible manufacturing system.

Through GE and Fanuc, the U.S. and Japan were in the forefront of the CNC revolution.

In Germany, companies such as Pitter, Gildermeister, Max Muller and Index were also in the van through a far-sighted agreement between Fujitsu and Siemens which gave the Germans access to the Japanese company's superlative control technology.

In Britain, manufacturers were hit by the twin pressures of what turned out to be one of the worst-ever recessions and a reluctance to take advantage of the new manufacturing methods.

To be sure, some of the earlier examples of integrated systems—machines grouped together to handle specific tasks with maximum efficiency —were disastrous; today, however, nobody doubts the value of CNC machining and many companies are eyeing hopefully the prospect of combining CNC machines with what is certain to be another major element in the factory of the future, robots.

Since 1975 or so, UK machine tool manufacturers and suppliers have caught up rapidly and most believe there is little to choose between the level of the most advanced technology seen in the U.S., Europe, Japan or the UK.

But the weight of experience lies with Japan.

A stage that has already been reached in Japan — and to a lesser extent in a number of other countries is the linking of equipment into what are known as flexible manufacturing systems (FMS) and it is indeed these that are generating most of the excitement now.

The concept means the creation of a group of machines, serviced by robots or computerised parts changers, and able to finish completely a part from raw metal, without human intervention.

Every country has companies specialising in FMS—in the U.S. it includes Cincinnati and Kearney and Trecker, in Japan Yawazaki, in Germany, Pitter.

In the UK the separately-owned Kearney and Trecker, Marwin (KTM) part of the Vickers group has been responsible for putting in some of the largest FMS installations, while the 600 Group and GEC Factory Automated Systems Technology are among the newcomers.

Robots are still comparatively new on the shop floor. Indeed, there are serious arguments in manufacturing circles over whether they are appropriate to the factory floor. Companies such as Unimation in the U.S., ASEA in Sweden and Hitachi-Seiki in Japan have no doubt of the outcome of that argument.

Robots have been used in a variety of major applications, spot welding, spray painting, machine loading and unloading, stacking and palletising. Now they are are being used for complex jobs such as assembly.

The creation of a "cell" of machines and robots usually means assembling components from different manufacturers—it is commonplace, for example, to see a Unimation Puma moving parts between machine tools from the U.S., Sweden and West Germany, but there is an increasing trend towards turnkey installation.

The "glue" that will hold the factory of the future together is computer (software) instructions — and it is chiefly software problems that are delaying more rapid implementation of factory automation.

The software is complex and that is why companies such as IBM, Sperry Univac, Honeywell, NCR, Hewlett Packard and other with great software experience believe they have a new future in the factory.

IBM itself is one of the leaders in the automated assembly of electronic devices.

The UK Government has recognised the importance of FMS by establishing its Flexible Manufacturing Scheme on June 8, this year.

FMS may change the face of contract machining: a small jobbing shop equipped with modern equipment could serve the needs of many customers.

Shops which will not make the change, will simply vanish. Large manufacturers will cease to make components in-house, relying instead on modern, sophisticated sub-contract shops, many believe. Large engineering concerns will be able to make small batches of components as cheaply as large.

The pace of factory automation is quickening: already, significant steps are being made in research to give robots vision and a sense of feel: some of the more foresighted manufacturers believe that an "unmanned factory" could be a reality within five years, rather than by the turn of the century.

Most of the computer intelligence needed is already available: the electromechanical problems have mostly been solved. Japan and Scandinavia have shown the way forward in labour relations.

This revolution has turned industry on its head and offered hitherto unheard of economies of manufacture: those companies which do not embrace the new technologies soon will be hopelessly left behind — and

POLITICS TODAY

A last fling with the unions

By Malcolm Rutherford

THE LABOUR PARTY *this* week published its manifesto for the next general election. But it is a measure of the party's decline in the opinion polls and of its estimation by the media that hardly anyone noticed.

Actually, the first statement is not quite accurate. The document published by the TUC-Labour Party Liaison Committee and called "Economic Planning and Industrial Democracy"* is not an election manifesto—or at least not yet. But there is little doubt that it will form a large part of it. It is also the product of years of work between the TUC and Labour Party leaders. The Liaison Committee was set up to oppose Mr Heath's legislation on industrial relations in the early 1970s and has continued in being ever since.

As the election approaches, *this is the document to which* people, including civil servants, will turn to see what a new Labour Government might be like. *Perhaps* with a mixture of surprise and relief, they might come to the conclusion that it could be lived with.

First, a few general remarks. The Labour Party has now tied itself more firmly than ever to the trade union movement. Far from deciding that the unions are a declining force and that too close an association with them is a political liability, the party has chosen to stake all on cementing the marriage.

There is the particular stamp of Mr Michael Foot here, but he is not alone. Mr James Callaghan, the previous Labour leader, tended to go in the same direction.

The corollary is that the unions have staked a great deal on the marriage with the Labour Party. But one suspects that they have done it for one election only. If Labour does badly, not only may its decline become terminal; the unions may also decide to become less identified with one particular political party, as many of their members have already done.

The document published this week is therefore the last fling of the doctrine that the unions and the Labour Party can work together to achieve economic success and social harmony. The real question is: can they deliver? We shall come to that later.

Some of the sillier statements in the document can be dismissed at once. For example: "Many industrialised countries . . . recognise that the concept of the 'free market' is an irrelevance in a modern and complex society." That was not the case of the France which the Liaison Committee seems so much to admire. I doubt if it is even the case of the France of President Mitterrand. It is certainly not the case of Hungary, which is bursting to move the free market way.

Again, take the final paragraph about confidence. "The confidence we seek is not the *chimerical 'confidence' of* financiers but the real confidence of the working people of this country." Tell that to the *Chancellor of the Exchequer* when the pound is weak. Tell it to Mr Denis Healey, who put his name to the document.

Much of the rest, however, is a serious statement of the alternative approach to the economy: the one which relies on planning rather than market forces and which depends on co-operation between government and unions and between government, unions and employers. The word "tripartite" occurs repeatedly.

The document also draws *heavily* on the experience of Labour governments over the years: from George Brown's abortive Department of Economic Affairs (DEA) onwards. The central theme is that "planning" has never been properly planned in a way that *it is claimed* to be in (say) France or Japan.

There is a great deal to back it up. The DEA failed, most *observers would now agree*, largely because it was overpowered by the Treasury. But there have been no great advances since. *Arguments* over public expenditure have resumed their pattern of battles between the Treasury and the major spending departments. There is no overall view. Witness the recurrent fights over spending on defence or the present palpable absence of any long-term transport policy.

The Liaison Committee wants a new Department of Economic and Industrial Planning. It is not just the DEA revamped. Paragraph 73 of the document states what might be accepted by either the Tories or the Social Democrats: "We propose that public expenditure planning (the PESC exercise) should become in reality the collective exercise at Cabinet level which it is presently only in name. In addition, PESC should be reformed to carry out the role for which it was originally designed: the medium-term *planning of public* expenditure to provide real resources to meet social and economic needs."

"It was ironic that . . . they refused to take questions on the rail dispute." Len Murray. GMWU general secretary David Basnett and Michael Foot at the conference to launch "Economic Planning and Industrial Democracy"

If you ignore the final flourish (what are "real" resources as distinct from "unreal" resources?), that is a very *sensible statement about* the machinery of government.

There is other evidence that Labour thinking has moved on *from the past: for instance,* the updating of the Bullock Report on employee participation in company decision-making. The *emphasis is now* on participation at all levels and much greater access to information. Readers may also be surprised by the *stress on the need for industrial* change, more training opportunities and the promotion of new technologies.

Anyone who doubts the expertise that has gone into the document should read the appendix on how the policies proposed might work in the electronics industry. It is certainly not written from a basis of ignorance, nor even ideology. Neither the Tories nor the Social Democrats have produced anything like such a comprehensive statement.

The political point, of course, is the commitment to the reduction of unemployment — to below 1m within five years. The document says that, immediately on coming to office, a new Labour Government will "publish a short statement on the broad economic strategy needed to achieve this objective." The statement would be discussed with the new National Planning *Council, a development* of Neddy, and would relate to the first of the proposed annual "national economic assess*ments" of what the economy* can afford, and how.

Again, this is a sign of how the Labour Party has advanced. *The idea of national economic* assessments is not so very different from what the Tory Party put forward in "The Right Approach to the Economy" before the last general election, nor from the old German practice of "concerted action," *on which the Tory thinking was* then based. Some of it lingers on in the Treasury.

It is easy to pick holes in all this. There is the glaring omission of an incomes policy on which previous attempts at co-operation between Labour governments and the unions have come to a sticky end. Mr Foot says that he is still working on it, though one should not doubt his determination to have a policy agreed with the unions ready before the election.

Other objections might be to the sheer bureaucracy that the proposed planning machinery would create, though again one should note the way that the Liaison Committee has bowed to the fashionable trend for decentralisation.

Equally, there is a tendency to idealise the French and Japanese models while ignoring the fact that they sometimes come under question *in their* own countries and that they are the product of quite different social systems. If everyone who *runs* industry, *commerce and* government goes to the University of Tokyo, it is not surprising that they have certain affini*ties, or at least a network.*

No less striking is the virtual absence of any reference to the U.S. America has, usually, a *fairly successful economy,* but without planning. It also has rather different labour laws, and more business schools.

Possibly a more quibbling objection is that it is not wholly clear that people who work for a company really want the degree of participation in its decisions that is now being offered. They might just want to earn their money and go home.

The fundamental test, however, is credibility. Can the unions and the Labour Party persuade sufficient of the electorate that they have finally got their act together? It was ironic that when Mr Foot and Mr Len Murray, the TUC General Secretary, were presenting the Liaison Committee's report to the press, they refused to take any questions on the rail dispute, which is a classic example of industrial relations breaking down—between the unions involved, between the unions and *a nationalised industry board,* and between the unions, management and government: a trial of weakness rather than of strength.

It is only part of an excuse to say that the Government also has no policy or, as Mr Murray said, that the unions will resume their responsibilities, when asked.

There must now be considerable doubt as to who the unions are—their leaders or their members.

Yet we should not forget the British electoral system nor the way that the political outlook can quickly change. The Labour Party could win the general election with little more than 30 per cent of the vote. Their fortunes could still improve beyond that.

Certainly, given the rail dispute and the health dispute as well as the unemployment figures, the Government's fortunes seem bound to decline. The argument is not against standing up to the unions. It is more likely to come to be seen as "standing firm for what?" On the railways the Government still has no answer.

It also turns out that the rivalry between Dr David Owen and Mr Roy Jenkins in the Social Democratic Party will go on. Dr Owen is *determined to resist* any move that would commit the SDP to an "irreversible" alliance with the Liberals. Mr *Jenkins thinks that the develop*ment of the Alliance is the best and only way of winning the election outright. Plainly, there *are squalls to come.*

So perhaps Labour still has a chance. The party could have an awful conference in the autumn, but then concentration will turn to the long run-up to the election. The important point to note is that Labour is developing a policy which is a clear alternative to anything else which is at present on offer. A lot depends on the unions.

* *TUC, Congress House, Great Russell Street, WC1, £1.*

Lombard

A fresh approach to the EEC budget

By Nicholas Colchester

EVEN BEFORE they leave for *their amply dimensioned holi*days, officials in Brussels are in despair at the thought of the next argument, in the autumn, *over the British contribution to* the EEC budget. It will be more unpleasant than ever, they predict. It will distract and *demoralise a Commission and* Council of Ministers already hard pushed to arrange the promised entry in to the Community of Spain and Portugal.

Part—and only part—of Britain's cash problem with the EEC is that everybody has become so negative in his view of it. How can a British Government, not very interested in Europe, avoid paying bills for a *common agricultural policy* which does not bring it great benefit and pass them on to other members who are becom*ing steadily more determined* not to pick them up? Put like that, the question is certainly a demoralising one.

The challenge

It might be more stimulating to ask: what does Britain want out of Europe? Can the British Government propose community programmes which will offset the EEC's excessive emphasis on agriculture and which will be of greater use to the UK than the CAP? This question is not of course a new one: it formed part of the ill-fated "mandate" to restructure the EEC budget. It is just thoroughly unfashionable when all Governments are trying to limit all forms of public expenditure. Nor is it an altruistic question: Britain blatantly wants more out of the Community and wants someone else to pay for it. The chief merit of this approach is that it conveys a more positive attitude to the Community than the unalloyed demand for "money back."

The challenge is to come up with suggestions for programmes which Mrs Thatcher's cabinet might find acceptable. This cabinet is nationalistic. It does not like public expenditure. It does not like interventionist industrial programmes controlled by bureaucrats, to say nothing of Eurocrats. It wants Europe to be little more than a free trade zone and a forum for co-operation on foreign policy where appropriate. The cabinet is no hot bed of European imagination.

Yet take the question of labour mobility and job training. Money spent here would *not interfere with* Mrs Thatcher's free market philosophy: it would help remove some of the friction and rigidity *which prevents the free mar*ket policy from yielding swift results. European spending in this area would oil the wheels of whatever approach to economic policy a member state chose to adopt, whether Thatcherite or Mitterrandiste.

Basic research is another area where European money could be spent without impinging too much upon the *sovereignty or philosophy of the* British Government. There is ample scope for a greater European investment in re*search at the "pre-competitive* stage" — that is before the competing national industries take up the idea thus spawned and run with them.

There is no reason why European spending should not be regarded as an alternative channel for national public spending rather than as an additional burden on our Public Sector Borrowing Requirement. If one accepts that unemployment is a mounting burden on all European exchequers why should one not pool some of the required spending in a European programme? Perhaps more contentiously, I would pose the same sort of question about investment in the transport system, in the infrastructure of the economy and even in the well-trodden field of regional development.

Whether in London or in Brussels such suggestions tend to be received with apathy. The British Government is not interested. There aren't enough projects to make much of a difference. The Germans won't pay. The revenue base of the EEC is too narrow. We've been through all this before.

It is true that a catalogue of new British proposals will not remove the need for CAP reform and will not remove the case for British compensation. But some evidence of British interest in making *more* of the EEC might make the British case more presentable and the next round of haggling a little more palatable.

Letters to the Editor

Finding the right economic stimulus

From Mr Tim Congdon.

Sir,—With the current worldwide recession by far the worst since the 1930s, Samuel Brittan is surely right to suggest in his Economic Viewpoint (July 8) that this is "not a time to run any risks in the side of deficient demand growth." But it is not consistent to urge both a demand stimulus and a 10 per cent limit on the growth of money GDP. A demand stimulus, if it means anything, must be followed by faster growth of money GDP than would otherwise have been the case. It is wishful thinking to believe that, merely by the announcement of *good intentions,* the Government can ensure that extra demand will be translated into real output rather than inflation.

The case for an interest rate reduction rests on the natural rate of unemployment concept which Mr Brittan has so lucidly explained on many occasions. The theory based on this concept *states that,* when unemployment is above the natural rate, wages settlements will fall and inflation decelerate. In the *1980-81 pay round settlements* were halved. Since then unemployment has risen and shows every sign of continuing to do so. It *follows that* wage settlements will drop further, exerting more downward pressure on inflation.

In these circumstances, if lower interest rates were successful in at least stabilising *unemployment, there would be* no serious and immediate inflationary risks. Moreover, stabilising the unemployment total *should be the minimum* at which the Government aims as substantial reductions would obviously be desirable if a resurgence in inflation could be avoided.

This argument is not ambitious and certainly makes no claim to quantify the right "demand injection." The record of the last 30 years is that phrases like "a £2bn stimulus" and "a £5 boost" are unhelpful. The Government cannot guarantee that the impact feeds through entirely into output and employment. Unless it does, there is no "stimulus" or "boost" to economic activity.

Perhaps the most disappoint*ing aspect of Mr Brittan's* article is its relapse into naive Keynesian vocabulary, a vocabulary which its author has criticised *strongly and frequently* in the past. There also seems to have been a return to Keynesian thinking and prescriptions. The suggestion that VAT and/or the National Insurance surcharge be cut by £3bn is crude fiscal reflation. It cannot be reconciled with the Government's objective to keep the PSBR declining as a proportion of national output. It also seems odd for Mr Brittan to be proposing fiscal stimulus when there is abundant evidence from nearly all the major industrial countries that big budget deficits make no contribution to economic *recovery* and are a tiresome nuisance in conducting anti-inflationary financial policies.

Tim Congdon.
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L. Messel and Co.,
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Nationalised dissatisfaction

From the Chairman NIFP

Sir,—I am writing as chairman of the Nationalised Industries' *Finance* Panel (*NIFP*), the members of which are the finance directors of the nationalised industries. I wish to express the *panel's dismay* and disquiet at the current moves within the Institute of Chartered Accountants in England and Wales to achieve the premature withdrawal of the Current Cost Accounting Standards SSAP16.

The debate which led up to the issuing of the standard was, I think, lengthy and public and although not all accountants fully supported the exposure drafts which preceded it, or indeed, SSAP16 itself, it is somewhat less than we in the nationalised industries would expect of a highly regarded professional institute for it to renege on a *publicly stated* objective to allow SSAP16 the agreed three-year trial period. When the nationalised industries chairmen's group published its interim code of practice on current cost accounting about 12 months before SSAP16, it was found to be invaluable to have had a period of practical experience as a run-in to CCA.

The majority conclusion, drawn from those giving evidence to the accounting standards committee working group led by Mr P. J. Custis to review the operation of SSAP16 after its first year, was that the standard should be retained intact for the whole of the three year trial period.

The NIFP fully supports this view and urges all accountants who are to vote on the resolution on July 29, whether in the public or private sectors to vote for the retention of the standard, since failure to keep the standard for the whole of the three-year period will surely be a retrograde step. We should have the courage and professional integrity to see the job through to its conclusion. After all, only when we have considerable practical experience of CCA can a credible professional assessment be made of amendments (if any) required to produce an acceptable standard for use into the future.

J. H. Smith.
Rivermill House,
152 Grosvenor Road, SW1.

Shareholders' Interests

From the Chairman,
Wider Share Ownership Council

Sir,—It is, of course, unfortunate that the latest target of pension fund militants should be the company which would probably be voted the best managed *in the country.* That, however, should not detract from the merits of their case, and your contributor Lombard (*July 9*) does ill to express satisfaction at their failure to make it stick.

The directors of a company like Marks & Spencer are quite justified in feeling secure. No majority of shareholders is ever likely to invoke the ultimate sanction (but sole recourse) of throwing them out. But that very *fact* should make the directors all the more concerned to exercise proper moderation over the benefits which they are able to vote themselves without the approval of the shareholders.

It is largely upon the vigilance of institutional investors that shareholders have to depend for the protection of their interests, and the pension funds have set an example which we would like to see followed more widely elsewhere. If these efforts led every so often to the removal of a few directors in companies less meritorious than Marks & Spencer, shareholders might have every reason to be grateful.

Edgar Palamountain,
Juxon House,
94 St Paul's Churchyard, EC4.

Control of the waterworks

From Mr Charles Simeons.

Sir,—As a member of the Parliamentary Standing Committee on the Water Bill and the only *MP* at the time to support small boards for Regional Water Authorities, I welcome the Government's decision 10 years later to adopt that course. How can it be possible to have democratic control in a system which virtually knows no boundaries and is transferred over very great distances. As the slogan in the Cardiff convenience reminds us: flush hard you are needed in Birmingham.

The proposal to wind up the National Water Council would appear to leave a void, with no central co-ordinating platform which the officers from the RWAs can use to compare experiences and offer a co-ordinated approach on a whole range of issues, not least the transfer of water between authorities. Executive powers should replace the present advisory role.

In future presumably control from Whitehall will replace the 400 strong Council. This may be too many, but supposing their strength were to be halved, could the Department of the Environment with its resources, from my personal knowledge, already fully stretched, really take on the additional work which the NWC has carried out in a fashion which together with the RWAs has earned the admiration of the international water industry?

New powers will be given to Whitehall which even the last Labour Government did not seek in the proposals contained in their Green Paper.

*The real problem for the con*sumer lies in the level of water charges stemming not from operational costs, but the component, often exceeding 50 per cent, arising from interest charges including loans inherited from the former local authorities and others who controlled sewage treatment.

I sincerely hope that in the process of dissolving the NWC the Minister will produce an authority with executive powers, to include the present elements vital to an effective industry, rather than just throwing away the experience gained over the years in the belief that the Men from the Ministry know best, a fact which few of them would claim to be true.

Charles Simeons.
21, Ludlow Avenue,
Luton, Beds.

UK COMPANY NEWS

Associated Newspapers halved at six months

THE COSTS incurred before the launch of The Mail on Sunday in May were mainly responsible for a setback in interim profits at Associated Newspapers. The pre-tax surplus fell from £10.78m to £5.4m in the six months to March 31 1982, on turnover £11.16m higher at £127.53m.

However, the interim dividend is maintained at 4.5p net—last year a total of 10.4p was paid from taxable profits of £16.24m. Half-year stated earnings per 25p share are 6.4p lower at 9.2p.

Trading profits were down from £7.2m to £1.9m. But this was before sharply higher interest charges of £520,000 (£117,000) and a reduced contribution from associates of £1.81m (£2.06m). Investment income, however, rose from £1.63m to £2.22m.

A substantially lower tax charge of £2.62m, against £6m, left net earnings at £2.78m (£4.78m). After a gain from minorities of £4,000, compared with a £38,000 debit, the available figure came through at £2.78m (£4.74m). Dividends again absorbed £1.37m.

Braithwaite moves ahead to £929,167

Pre-tax profits at Braithwaite & Co. Engineers show a rise from £808,569 to £929,167 for the 12 months to March 31 1982. Turnover of this bridge and construction engineer improved from £8.3m to £9.53m.

At the interim stage the directors expected second half profits would be similar to those in the first half, when the result slipped from £410,000 to £401,000.

The net dividend is being raised from 7.7p to 8.1p with an increased final of 5.1p (4.7p).

After a tax charge this time of £85,500 compared with a previous credit of £580,000, earnings per £1 share were given as rising from 18.4p to 30.9p.

On a current cost basis pre-tax profits were shown as falling from £646,000 to £507,000.

Greycoat Ests. jumps ahead to £810,000

Taxable profits of property investor and developer Greycoat Estates jumped from £340,000 to £810,000 in the year to March 31, 1982, on turnover £42,000 ahead at £934,000.

With earnings per 10p share stated higher at 3.4p (2.3p) the year's single dividend is being raised from 0.37p to 1p net as forecast.

Tax took £291,000 (£128,000) leaving net profits of £519,000 (£212,000). The pre-tax figure included a contribution from associates of £85,000 (£5,000 losses).

BOWRING U.K.

Bowring UK has formed a new company, Bowring UK Marine Cargo, to handle the UK marine cargo insurance business which has been transferred from the marine division of C. T. Bowring and Co. (Insurance).

Thorn EMI advances to £105.4m

FOR THE year ended March 31 1982 Thorn EMI has increased pre-tax profits from £94.3m to £105.4m, on external turnover of £2.44bn, against £2.23bn. A significant advance was made by the music division and the lighting operation showed a return to profitability, but the films, video software and leisure operation incurred a loss.

At halfway, taxable figures were up from £38.6m to £45.5m.

Profits attributable to ordinary holders rose from £60.2m to £66.1m for the year, after tax of £33.2m (£27m), minorities and preference dividends. Earnings per 25p share climbed by 3.4p to 37.9p and the dividend total is maintained at 14.625p net with a final of 10.575p (same).

A charge of £5.6m (£2m credit) for extraordinary items represented the estimated cost of withdrawal from certain business, less profit on sale of investments. Ordinary dividends again absorb £25.5m leaving retained profits of £35m, compared with £36.7m.

At the trading level, profits increased from £282.5m to £334.3m. Depreciation charged was £193.2m (£153.5m) and interest took a further £35.7m (£34.7m). Profits before interest were ahead from £129m to £141.1m and were split geographically as to: UK (including export) £88.5m (£94.5m) and overseas £52.6m (£34.5m).

A product analysis of turnover and pre-interest profits shows respectively: consumer electronics £685m (£557.8m) and £72.9m (£69.6m); music £466.9m (£411.5m) and £36.7m (£20.4m); films, video software and leisure £97.4m (£92.2m) and £10m loss (£2.8m profit); engineering £606.9m (£593.9m) and £19.6m (£29.8m); domestic appliances and retail £502m (£469.4m) and £21m (£16.7m); lighting £234.5m (£220.1m) and £0.9 (£10.1m loss); terminated operations nil (£25.3m) and nil (£0.2m loss).

Sir Richard Cave, the chairman, reports that the management in several of the group's businesses has reduced capital employed in line with the lower levels of demand and they have a more competitive cost structure. The UK labour force was reduced by a further 8,400 last year, but Sir Richard says the real benefits of the resulting improvements in productivity will only become apparent as markets move out of recession.

The group has continued to improve efficiency and to follow the strategy of investing in two high-growth areas—home entertainment and high technology engineering.

In home entertainment, last year's recovery by the music division has been followed by a further profit increase. Significant improvement was achieved in several areas despite a lack of growth in the market. The results reflect the benefits of previous rationalisation measures, strong world-wide management and the growing development of excellent repertoire.

Demand for video recorders and the pre-recorded video cassettes again exceeded expectations and this continues to be a buoyant business.

Thorn EMI Video Programmes consolidated its position as a leading UK distributor and has also established itself in Europe, the U.S. and Australia. But commitments made in earlier years together with recent trends in the film business resulted in losses.

The engineering side was affected by shortage of orders from British industry. In addition, costs were incurred in rationalisation measures in the general engineering and technology divisions where prompt action was taken to reduce capital employed.

The central heating division enjoyed better trading conditions and the gas division benefited from both improved products and better manufacturing efficiency.

Sales and profits of the electrical appliances division continue to be depressed with short-time working and further redundancies being incurred.

The group's retail chain of shops made progress with strong demand for video products although intense competition in the High Street for most other products reduced margins.

Although the UK market for lighting products continued to decline during the year, the lighting division achieved a small profit as a direct result of the fundamental restructuring already underway at the beginning of the year.

Gross cash flow for the year totalled £273.1m (£224.5m) and capital expenditure amounted to £325.8m (£223.9m). An increase in creditors and provisions for the year of £103.9m and tight control of stocks and debtors limited the increase in borrowings for the year to £32.1m.

Net borrowings (after deducting liquid funds) at March 31 1982 amounted to £243.8m (£211.7m) representing 28.2 per cent (26.3 per cent) of total capital employed before deducting deferred tax.

See Lex

Dowty expands £3m to £39m at year end

SECOND-HALF pre-tax profits of Dowty Group expanded by £6.25m to £23.44m and pushed the full year's figure, to March 31 1982, to £39.14m, compared with a previous £36.24m. Turnover went ahead from £316.2m to £350.8m.

The directors say that while the aerospace and defence sector again increased turnover, with some recovery in margins in the second half, profits reflected the more difficult conditions earlier in the year and the closure costs of two smaller companies.

The mining and industrial divisions continued their modest recovery in sales margins over the first half, directors state, and "performed particularly well in overseas markets."

The electronics side recovered some way from its earlier trend, although deliveries of certain products remained restricted, and research and development costs continued at a high level.

A divisional split of turnover and trading profits—£39.76m (£36.45m) — shows: aerospace and defence £166.73m (£138.44m) and £24.59m (£23.85m); mining £120.1m (£118.69m) and £10.03m (£8.03m); industrial £37.53m (£33.21m) and £3.55m (£2.06m); electronics £26.46m (£25.86m) and £1.6m (£2.51m).

The directors feel that the volatility of world market conditions makes accurate forecasting increasingly difficult, but "with aggressive marketing and strong management action to control costs we expect to make further progress during the current year."

They add that the group's order book at the year end had increased slightly, but insufficiently to cover the rate of inflation.

Increases in productivity, however, should ensure improved operational efficiency on the aerospace side, while the mining, electronics and industrials divisions should all make steady progress, the directors state.

Earnings per share are shown unchanged at 13.6p per share and the dividend is effectively increased to 3.7p (3.33p) with a final payment of 2.15p net.

Net investment of £21m in fixed and short-term assets and £9.2m in working capital was substantially covered by cash generated from operations. Net external borrowing increased by £5m, largely to finance acquisitions, principally Polypac in Italy.

The directors add that the RFI acquisition for $16m cash, since the year end, was accomplished within the group's normal facilities.

Associates share of profits was well down at £3,000, against £115,000 and interest charges amounted to £625,000 (£324,000).

After tax, £11.5m (£8.72m) and minority interests £118,000 (nil), the attributable profit was unchanged at £27.53m.

See Lex

Good second half boosts Howden to £8.69m

AS ANTICIPATED in the interim report second half pre-tax profits of the Howden Group continued the rising trend of the first six months and figures for the full year to April 30 1982 showed an appreciable rise to £8.69m, compared with the £7.75m returned previously — second half rose from last year's £4.7m to £5.32m.

Mr Norman Elliott, the chairman, expects another satisfactory profit performance in the current year. He says the group's order book is at a high level and liquidity will remain strong.

Stated earnings for the 1981-82 year edged ahead to 17.8p (17.6p) and the dividend is being stepped up from 4p to 4.4p net per 25p share by an increased final of 2.94p (2.67p).

Turnover of the group, an engineer and specialist in the design and manufacture of air, gas and fluid handling equipment, advanced from £115.24m to £142.17m.

Tax took £3.43m (£2.56m), minorities added £32,149 (£24,510) and there were extraordinary debits of £472,181 (£264,000). At the attributable level profits slipped to £4.82m (£4.95m), from which dividend payments will absorb £1.31m (£1.2m).

The chairman comments that James Howden and Co had another good year and made a substantial contribution to group profits. Airscrew Howden, which specialises in a sophisticated range of fan products and systems, was affected by the continuing international market recession and the cumulative effect of the Ministry of Defence moratorium. However, he points out that the company has entered the current year with a strengthening order book which includes cooling systems for the new British Army "Challenger" tank, fans for two more North Sea oil platforms and equipment for the London Underground renovation programme.

In Canada Brown Boveri Howden had another successful year, making a significant contribution to group profits and Godfrey Howden, specialising in aircraft environmental control systems and ground servicing equipment, made satisfactory profits.

The group's companies in the U.S. had a mixed year. Quabbin Howden results were poor and it was decided to discontinue its activities.

The Australian companies made a useful contribution to group profits, with Godfrey Engineering showing a greatly improved performance, and the South African companies had another good year.

Group pre-tax profits on a CCA basis were £6.27m (£5.31m).

● comment

Howden's pre-tax outturn of £8.7m was better than the market had been expecting helping the shares off a 1982 low with a 5p rise to 138p. As an engineering company Howden has benefited from having around two-thirds of turnover overseas but these figures include a loss from Howden Group America. Capital expenditure at £4m was half the comparable figure and gearing has fallen 5 points to 27 per cent. For the rest of the 1980's Howden sees S. Africa as the brightest spot with a great deal of work expected on coal fired power stations. On the nuclear front, AGR contracts are set to make their biggest contribution to profits in 1983-86 but thereafter a lack of world demand for AGRs could well present some problems. At 138p the shares yield only 4.7 per cent—but then not many British engineering companies have had five years of unbroken profits growth.

Vosper falls to £0.8m

TAXABLE PROFITS of Vosper, the shipbuilding subsidiary of David Brown, fell from £961,579 to £782,133 for the six months to April 30 1982 on turnover £7m higher at £15.4m.

The interim dividend is being raised from 1p to 2p net and the directors expect to recommend a final of not less than 2p—last year a total of 4p was paid from pre-tax profits of £1.96m. Half-year earnings per 25p share are shown to have fallen from 14.4p to 9.4p.

The directors say the period under review saw further growth in turnover in real terms with all the group's trading companies operating profitably.

Profits at the trading level were marginally lower at £1.22m, against £1.26m. But this was before depreciation of £260,268 (£200,263), interest charges of £413,381 (£432,380), investment income of £267,609 (£335,766), and associate losses of £28,360 (£3,186 profit).

Tax took £214,000 (£94,000) and after crediting revaluation of investments of £848,532 (£90,765), attributable profits came through higher at £1.42m compared with £958,344.

Sir John Rix, the chairman, said in his last annual statement that the company had recently received the Government's written observations on its claim to the European Commission of Human Rights for fair compensation.

On July 8 the group delivered its comments on the Government's observations. The written procedure has been completed and it will be for the Commission to decide on how the matter will proceed, Sir John says.

● comment

Vosper's interim figures reveal a halving of trading margins to a more "normal" 8 per cent, the comparable figure having been distorted by profits on the sale of boats on which all the overheads had been sustained in the previous year. With Hovermarine now busy on an £11m order for its surface effect ships, Vosper is not so disproportionately dependent on earnings from its Singapore subsidiary. While shareholders' earnings show a drop of 35 per cent, attributable profit has risen 48 per cent to £1.4m. Why? Yarrow's shares, of which Vosper holds 25 per cent, recorded a sharp rise, that's why. Vosper's shares have attracted speculative interest because of the company's compensation claim against th Government. Even if the European Commission eventually decides in favour of Vosper et al. it should be recorded that Vosper has never made any commitment to redistribute the fruits of its litigation to shareholders (half of whom are Sir David Brown).

Wheeler's slips to £307,436

Group pre-tax profits at Wheeler's Restaurants for the year to April 2 1982 fell back from £383,322 to £307,436, on turnover up from £6.71m to £7.25m.

The company, which owns 15 oyster and fish restaurants in London and Brighton, proposes to pay a final net dividend of 4.33p per 10p share, maintaining the payout for the year at 5.88p. Stated earnings per share are 17.41p (11.71p).

After a first half which saw a sharp decline in profits from £237,012 to £173,943 and a fall in the number of customers served, the company managed to maintain profits for the second six months at just below the level of the corresponding period last year.

During the year, the company purchased the remaining 40 per cent minority interests in Wheeler's (Fishmongers) and acquired the business of a wholesale fishmongers in Billingsgate Market. The goodwill purchased or arising from these transactions of £18,202 has been written off as an extraordinary item.

Other new ventures included the opening of a third City restaurant and a wine bar.

Group profit after tax is £263,604 (£188,472). Less a minority interest of £2,412 (£7,807) and the extraordinary item, profit attributable to shareholders comes through at £242,990 (£175,665).

SPAIN

July 15	Price %	+ or —
Banco Bilbao	300	
Banco Central	254	+10
Banco Exterior	221	+3
Banco Hispano	268	+4
Banco Ind. Cat.	106	−1
Banco Santander	293	+8
Banco Urquijo	158	−1
Banco Vizcaya	318	+6
Banco Zaragoza	233	
Dragados	105	+5
Espanola Zinc	64	
Fecsa	65.2	+0.7
Gal. Preciados	28	
Hidrola	57.5	+1.5
Iberduero	44.7	+0.5
Petroleos	73	
Petroliber	88	−2
Sogefisa	5.5	—
Telefonica	65.5	+0.5
Union Elect.	56.7	+1.5

GUS moves ahead to £189m and pays more

SECOND-HALF profits £5.3m higher at £107.92m meant that Great Universal Stores, mail order and multiple retailing group, finished the year to March 31 1982 with the pre-tax surplus ahead from £179.53m to £189.16m.

Turnover rose from £1.76bn to £1.84bn, including VAT of £182.93m, against £178.47m.

An increased final dividend of 8.25p raises the total from 12.5p to 13p net. Stated earnings per 25p share are up from 40.64p to 42.63p.

So far this year the group is still moving ahead, with sales and profits slightly up on last year. However, trading remains difficult.

Mr Trevor Spittle, finance director, said yesterday: "We are not underestimating the problems that lie ahead."

In the mail order division, UK turnover rose and profits were near the previous year's "exceptionally good" total. Overseas mail order operations improved. Furniture also did well, with sales and profits ahead.

Burberrys did well at home and overseas, as did the finance division.

Tax for the year took £83.08m, against £78.41m. Minorities absorbed £26,000 (£19,000) and preference dividends again accounted for £70,000. Extraordinary credits were substantially lower at £427,000, compared with £1.04m, leaving the available surplus £4.33m higher at £106.41m.

Provisions for unearned profit, service charges and collection costs amounted to £147.16m (£140.07m) at the year-end.

The group's freehold and leasehold properties in the UK and overseas were professionally valued at March 31 1979. This valuation disclosed a surplus of about £250m over the net book value. Edward Erdman recently informally advised the board about the valuation of the group's UK properties at March 31 1982. This would result in the surplus at the year-end increasing by about 25 per cent.

As before, the group is unlikely to incorporate the latest increase in property values in the books, although it will be reflected in the CCA figures.

● comment

Finance and furniture combined to keep GUS moving smoothly ahead in the year to March. The UK clothing and footwear multiples had a setback, feeling the competitive draught while High Street occupancy costs continued to rise. Mail order sales increased—as was only to be expected given a full year's use of the John Myers agent-list—but profits fell away. Furniture sales and profits, however, managed to increase even in the UK. That comparative success was repeated overseas, where mail order also generated better contributions everywhere. Although GUS re-wound its stock position—following the previous year's destocking exercise—net cash still rose by £50m between balance sheets. At 475p the shares are ticking over on nearly 13 times fully-taxed earnings, and the 4 per cent yield (after a faintly parsimonious increase) emphasises that the recessionary-defensive arguments for GUS still hold some sway. Sales and profits are again marginally ahead in the current year, but without any hint of the general volume-recovery which would trip the market into making its traditional switch from GUS into more cyclical retailers.

Asprey rises to £4.87m

A satisfactory outcome for the year ended March 31 1982, was expected by the directors of Asprey & Co. at the interim stage, and in the event the full year pre-tax profits improved from £4.13m to £4.87m on higher turnover of £23.95m against £20.09m.

At midway, taxable profits were higher at £2.13m (£0.78m).

The company operates as a goldsmith, silversmith, jeweller, leather worker, antique dealer and bookbinder. It gained a quotation on the unlisted securities market last October.

The final dividend has been lifted from 20p to 27p which raises the total from 35p to 42p. Earnings per 25p share are given as rising from 136.7p to 155.65p. The directors are proposing a 2-for-1 scrip issue.

Tax took £1.68m (£1.39m). Extraordinary debits fell from £285,000 to £170,000.

BENLOX RIGHTS ISSUE RESULT

Some £0.34m of the £0.94m rights issue made by Benlox Holdings, the building contractor, has been left with the sub-underwriters. The issue of 936,000 8 per cent convertible cumulative preference shares of £1 each at par was taken up as to 600,101, on a one for every five ordinary basis.

The directors took up their full entitlement of 95,400 and the rest had been underwritten by Dawnglen Finance, a company controlled by Mr M. A. C. Buckley, the Benlox chairman.

Distillers' second half recovery

SECOND half pre-tax profits of Distillers Company, the Scotch whisky and gin concern, increased by £9.3m to £112.5m, but the figure for the full year ended March 31 1982 was just behind at £178.5m. This is compared with £181m previously which included a £8.7m surplus on realisation of investments.

At midway, profits had dropped from £77.8m to £66m and directors said that after allowing for the group's portion of United Glass, its associate, and recognising that the price of British Petroleum shares did not encourage disposals, profits for the year were expected to be lower.

Sales volume of both Scotch whisky and gin—brand names include Johnnie Walker, Dewars, Vat 69 and Gordon's—declined compared with 1980-81, but turnover and trading profits showed modest increases to £1.08bn (£1.04bn) and £181.6m (£174.7m) respectively—duty included in turnover was £316m (£315.9m).

Whiskies bottled in Scotland and Tanqueray gin are invoiced to the U.S. in dollars and directors say the strength of that currency, during the second half, benefited profits appreciably.

The board believes that the group's world sales by volume will be close to those of 1981-82, "with a modest improvement in profits."

The directors say, however, there is, as yet, little sign of accelerated activity in world trade generally and that the company must have regard to the fact that the U.S. and other leading markets remain depressed.

The food group achieved a substantial profit recovery in spite of the somewhat depressed state of the markets in which it operates and the carbon dioxide company again showed a small increase in profit, directors say.

All sections of United Glass continued to suffer from the recessionary conditions. Redundancy payments and other costs of facility closures were higher than in the previous year with the result that an increased loss was recorded, our share of which was £3.1m, compared with £2.8m.

An increase of 1p in the final distribution, to 8.75p, has lifted the total dividend by that amount to 11.75p (10.75p) net per 50p share and after tax, lower at £49m (£56m), earnings are shown as 35.8p (34.42p) per share.

Pre-tax figure for the year included investment income of £5.8m (£5.5m) and an exchange profit of £0.3m (£0.1m), but was after finance charges, up from £5.2m to £6.1m, and the associate's losses.

After minority credits of £0.5m (nil) and an extraordinary debit of £0.3m (£1.7m) the attributable balance came through ahead from £123.3m to £129.7m.

CCA pre-tax profits are given as £89.2m (£88.2m).

See Lex

Christie-Tyler loss jumps to £2.9m

ADVERSE CONDITIONS helped take Christie-Tyler from a pre-tax profit of £567,000 last year to a loss of £2.92m in the year to April 30 1982, while turnover fell from £74.39m to £71.27m.

Second-half losses were particularly acute at £2.18m, compared with a profit of more than £1m in the corresponding period. There is no dividend compared with 4p paid last year.

Some £2.3m of the losses were incurred at just one of the company's subsidiaries. This traded at the lowest end of the market, which has been most hit by the economic climate. Its closure led to an extraordinary charge of £1.95m.

The group, a holding company with interests in furniture and upholstery manufacture, was severely affected by the bad weather in the peak January sales period. This followed a very quiet trading period in the autumn, normally the industry's busiest time for sales.

The company says conditions remain very difficult in the industry as a whole and are not expected to show any worthwhile improvement in the current trading year.

However, action taken has reduced losses sharply, and the group expects to return to profit in 1982-83. Borrowings are well within the company's facilities and the interest charge of £585,000 compares with £504,000 for the previous year.

There was a tax credit of £374,000 (£774,000). Losses per 10p share are put at 28.4p (earnings 13.9p).

Haslemere better than expected

TAXABLE PROFITS of Haslemere Estates rose from £5.88m to £6.08m for the year to March 31, 1982, and topped the directors' forecast of £5.5m made in their interim statement. The second six months' contribution, however, declined by £309,000 to £2.69m compared with the corresponding period.

Stated earnings per 10p share moved ahead to 18.06p (16.35p) on a net basis but on a nil basis fell from 15.28p to 14.48p. As forecast the total dividend is being lifted from 6p to 6.9p net by an increased final of 5.25p.

Net rental revenue was in line with expectations at £13.33m (£12.71m). After-tax profits advanced from £4.74m to £5.25m, from which dividend payments absorb £2.01m (£1.74m).

Net asset value per share at year end was £6.42 (£5.84) basic and £5.63 (£5.36) diluted.

The group's properties in the investment portfolio were revalued and at March 31, 1982, stood at £232.02m (£215.1m).

● comment

Having forecast a small setback at £5.5m when it floated its £21.6m rights issue last December, Haslemere has turned in a marginal profits gain. Undoubtedly there was an element of conservatism in the original arithmetic but the trading figures have come through a bit better than Haslemere expected. Also interest rates eased in the final couple of months. But the figures had little impact on the shares which held steady at 340p yesterday—a 40 per cent discount to the latest net asset value which has been upgraded by £17m, 7.9 per cent. Strip out new developments and the underlying increase is in the area of 5 to 6 per cent. For today's property market that is about as much as can be expected. Though the discount to NAV is double the level of a year ago such has been the change of market sentiment towards property values and Haslemere does at least sit at the better end of the sector's spread of discounts.

Unigate at £38.3m after meat setback

SECOND-HALF taxable profits of Unigate have fallen from £23.5m last time to £18.2m leaving the full-year figure to March 31 1982 only marginally ahead at £38.3m, against £38m previously. Turnover for the 12 months rose from £1.35bn to £1.5bn.

Mr John Clement, the chairman, says that 1981-82 profits were adversely affected by a major setback in the company's traditional meat processing businesses, and to a lesser extent by the "disastrous" winter weather.

The final dividend is unchanged at 4p net, but reflecting the increased interim, the total payout is higher at 6.5p (6.2p) per 25p share. Stated earnings per share however, dropped from 14.6p to 13.8p.

At the trading level, profits showed an advance from £40m to £46.7m. UK profits rose by £5m to £35.2m and the U.S. contribution was £2m higher at £5.5m, but the result from other countries slipped from £6.3m to £6m.

A divisional split of trading profits by activity shows: milk and milk products—UK £31.3m (£23.6m) and overseas £6.5m (£6.3m); meat and meat products £5m loss (£3.4m profit); transport services £6.2m (£4m); industrial and food services £7.7m (£2.7m).

Associates' contributions improved from £0.4m to £2m, but net interest charges rose sharply to £10.4m (£2.4m). Tax took £7.9m (£6.5m), minorities £0.2m (£0.3m), and there was an extraordinary charge of £14.5m (£13.1m credit)—the costs of rationalisation, closures and sales of businesses.

After preference dividends, profits attributable to ordinary holders came through well down at £15.6m, compared with £44.2m.

The chairman comments that Unigate's aim is to achieve a balance between organic growth and quality earnings. The group plans to increase the profit contribution from its non-milk operations, but Mr Clement warns that trading profits as a percentage of trading capital employed now stands at an "unsatisfactory" 12 per cent, largely due to meat losses.

Efforts to improve this position have included the closure of the Scot Meat Products' factory at Bletchley.

During the year, £32m was spent on the newly consolidated dairy division, St Ivel, to increase the efficiency of existing plant and invest in expansion.

Wincanton Group achieved excellent growth, the chairman says, and the expansion of its contract operations continues.

The recently acquired Giltspur Group, comprising exhibition service, engineering and freight related businesses made its first full year's contribution.

Also the purchases during the year of Clipper Seafoods added fish processing to Unigate's meat interests, and Casa Bonita, a speciality food service operation in America, provided a substantially larger U.S. earnings base.

Mr Clement estimates that the bad weather has cost some £2m in lost profits in the second half.

Indicating he still has takeover ambitions, Mr Clement says "it is our intention to grow by acquisitions where they fit with the business plans of existing operations or the group as a whole. This will lead to a natural reduction in the contribution from milk businesses in the UK to 50 per cent or less.

"We are broadly on course, but not without difficulties," he states. Capital spending last year was £75m, which includes £12m leasing. This year's total is expected to be broadly similar.

Own label operations are seen as important in the meats side, with this year one of recovery and further rationalisation.

Unigate is having a "thorough going review" of meat operations and hopes that results will be down towards break-even this year and profits next year.

Mr Clement concludes that Unigate's balance-sheet remains healthy and the group is broadly on course with its strategic objectives.

See Lex

LMI profits down £1m but dividend maintained

TAXABLE profits of London and Midland Industrials, engineering and industrial services and consumer products group, fell from £3.01m to £2.03m, for the year ended March 31 1982, with most of the downturn coming in the first six months—some £760,000 to £1.06m.

The results were after all redundancy costs incurred in the ongoing business.

Although any signs of world economic recovery have been slight, directors say there are indications that the situation has at least stabilised.

Mr C. M. Beddow, chairman, states that the group remains financially in a strong position "with important cash balances, only nominal gearing and substantial long term resources."

The dividend has been maintained at 7.75p net per 25p share with a same-again final distribution of 4.85p.

Turnover for the 12 months was behind at £39.84m, compared with £43.32m, and trading profits totalled £2.75m (£3.29m) which were split as to: engineering and industrial £0.9m (£1.63m) and consumer products £1.85m (£1.66m).

The chairman explains that, recently, some important divestments and strategic changes have been made "which will reflect positively in future group operations and results."

The companies concerned are Cadulac Chemicals, Woodmet, Doran Engineering, and London Coated Sheet Company, which have been either sold or closed down.

Extraordinary debits to cover these items amounted to £953,000 (£76,000) which, after a tax charge of £593,000 (£792,000) leaves the attributable balance well down at £480,000, against a previous £2.14m.

After dividends there was an £826,000 loss (£848,000 profit) retained. Earnings per share are given as 8.6p (11.5p).

Mr Beddow says the result of the rationalisation will be elimination of ongoing losses in those companies, the further strengthening of group cash holdings by over £1m, and the release of management resources to concentrate on growth areas and pursue opportunities for expansion.

He adds that with the rationalisation achieved "we expect to see increased activity in areas of our existing businesses, where we shall continue to invest."

On a current cost basis pretax figure is reduced to £824,000 (£2.11m).

● comment

It is two years since LMI's merger with Winn Industries and yesterday's expected poor figures make the benefits to the pre-tax line appear more elusive than ever. The reality is that the deal substantially strengthened the consumer products division. Here record performance by Compton this time pushed trading profit up £0.19m to £1.85m. This partially offset the severe setback in engineering, down from £1.63m to £0.9m, despite record figures from Systematic Drill Head. The difficulties last year certainly forced the group to grow up quickly and realise that its future did not lay with a multitude of small low potential companies. Five companies were disposed of—three by management buyouts—and related losses of £190,000 were taken as an extraordinary item. But the loss making diecaster Ariston has been retained and may struggle to break even next year. Justified caution in the search for acquisitions—currently in the U.S.—leaves the balance sheet showing a healthy growing net cash position. Meanwhile payment of a maintained dividend, which is uncovered after the extraordinary debits, reflects management's confidence that the group is on course again and sales ahead in the first two months. A view supported by yesterday's 9p leap in the share price to 88p, compared with a net asset value of 94p, for a fully taxed p/e of 14 and yielding 13.2 per cent.

Eurotherm expands to £2.25m

A SHARP improvement is shown in interim pre-tax profits at Eurotherm International from £1.17m to £2.25m for the six months to April 30 1982. Turnover of this maker of electronic equipment moved ahead from £12.51m to £17.07m and a higher dividend is being paid.

The results are excellent compared with those previously achieved at this stage, say the directors, but they should be viewed with caution in making projections for the full year.

The directors point out there are strong indications that the pattern will not follow recent years when more than 60 per cent of profits came in the second half. In the last full year pre-tax profits amounted to £3.27m on sales of £27.6m.

The directors expect second-half profits to be similar to those achieved in the first half. They say there will be a significant increase in overheads in the second half because of implementing plans for expansion.

The interim dividend has been lifted from 1.5p to 2p. Last year a total of 5p was paid. Earnings per 10p share for the first six months were given as rising from 5.78p to 11.31p.

In the UK the first half produced good results from all four established companies—UK sales totalled £7.58m (£5.34m) — with particularly significant improvements in SSD and TCS, and performances well up to plan for new ventures.

Overseas, where sales rose from £7.17m to £9.49m, both major U.S. companies made further progress and results in France continued to improve.

Pre-tax profits were struck after exchange gains of £5,000 (losses £26,000) and lower interest charges of £234,000 (£322,000). Tax totalled £928,000 (£500,000).

Retained profits came through ahead at £1.07m (£499,000).

● comment

Bearish noises from the company aside, Eurotherm is once again a stock market darling. The shares have had a good romp in the past 12 months, growing by 45 per cent compared to a sector gain of 34 per cent. The company modestly projects a doubling of these figures for the year. Even so, a £4.5m result is more than most had been hoping for anyway. The company's glamour rating of around 24, however, does not seem to hang on the sales of electronic control equipment any more. These businesses continue to do well, but the excitement about Eurotherm stems from its expansion into the more sophisticated computer application markets such as shop-floor automation and the development of peripherals in the data recording market. These businesses require brains, not money, so provided Eurotherm can hold on to its people, the company continues to hold out good growth potential to its shareholders. Assuming a similar rise at the final, the shares at 440p have a prospective yield of 2.1 per cent.

Marling Inds. pushes ahead to £1.58m

A sharp increase in pre-tax profits for the year to March 31 1982 from £405,000 to £1.58m is reported by Marling Industries. Turnover rose from £19.82m to £22.17m

The company, which manufactures industrial textiles, proposes a net final dividend of 0.61p per 10p share, giving a total for the year of 1.08p (0.94p). Earnings per share are stated at 10.56p (1.83p).

The directors say they have negotiated an arrangement with Finance for Industry which will provide up to £3m in long term finance both to repay short term borrowings and make available substantial funds for further expansion and development.

There was a tax credit for the year of £30,000 (charge £129,000), and an extraordinary credit of £122,000 (£792,000). Interest payments amounted to £678,000 (£648,000) and minorities took £14,000 (£1,000).

Jones, Stroud up £1.3m

SLIGHTLY BETTER than expected results have been shown for the second half at Jones, Stroud, maker of fabrics, accessories and materials, with full-year pre-tax profits rising from £1.31m to £2.6m for the period to March 31 1982.

At the interim stage the directors expected the second half to match the first, when pretax profits rose from £685,000 to £1.2m.

However, at the year end the directors say there is, as yet, little sign of a recovery from the recession. They say that for the company to make further substantial progress depends on an upturn in general economic activity.

The dividend has been held at 5.2p net with a repeated final of 3.2p. Earnings per 25p share are given as rising sharply from 8.52p to 16.05p.

Turnover for the 12 months was little changed at £29.27m, against £28.16m previously. At the trading level profits rose from £1.66m to £2.86m.

Pre-tax profits were struck after lower net interest payable of £520,000 (£744,000), but included associate profits of £442,000 (£395,000).

There were extraordinary credits last time of £135,000. Attributable profits this time emerged higher at £1.48m (£908,000).

The directors say that a surplus from the revaluation of freehold property of £1.31m, and from unrealised exchange movements during the year of £207,000 (£42,000), have been added to reserves.

On a current cost basis pretax profits were reduced to £1.54m (£654,000) and earnings per share were given as 4.53p (1.29p).

Yeoman Inv.

Net earnings of Yeoman Investment Trust rose to £401,654 for the six months to June 30 1982, against £376,711 last time, with gross revenue up at £702,080 from £650,436. The interim dividend is maintained at 2.5p net per 25p ordinary share.

Gross revenue was struck before administrative expenses of £68,454 (£58,905) and interest charges of £25,044 (£32,796). Tax took £206,928 (£182,024).

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether the dividends are interims or finals and the subdivisions shown below are based mainly on last year's timetable.

TODAY

Interims — Glasgow Stockholders Trust.

Finals—Bristol Evening Post, Fobel International, Investment Company, William Sommerville, Syltone, Victoria Carpet.

FUTURE DATES

Interims—	
Adams and Gibbon	Aug 10
Bullough	July 22
Commercial Union Assurance	Aug 10
Jamesons Chocolates	July 22
Law Debenture	Aug 5
Lowe (Robert H.)	July 22
Sth. African Land and Explrn.	July 22
Vaal Reefs Explrn. and Mining	July 22
Western Deep Levels	July 22
Finals—	
Atlantic Assets Trust	July 22
Hampson Industries	July 22
Independent Investment	July 22
Jarvis (J.)	July 29
Old Swan Hotel (Harrogate)	July 23
Priest (Benjamin)	July 27
Regional Properties	Aug 2
Tomkins (F. H.)	July 26

To the Holders of

FUJITSU FANUC LTD
(now FANUC LTD)

4½% Convertible Bonds Due 1996

Pursuant to Condition 5(C) (xii) of the Terms and Conditions of the Bonds, notice is hereby given as follows:

1. A public subscription to 2,500,000 Shares of our Company will be made on July 31, 1982 in Japan at a price of Yen4,100 for each Share.
2. As a result of such subscription, the Conversion Price at which the above-mentioned Bonds may be converted into Shares of our Company will be adjusted effective as of July 31, 1982, Japan time, from Yen 5,641.7 per Share to Yen 5,614.0 per Share pursuant to Condition 5(C) of 4½% Convertible Bonds Due 1996.

FANUC LTD

Dated: July 16, 1982

W. S. Yeates jumps 180%

PRE-TAX profits rose by 180 per cent at W. S. Yeates in the six months to April 30 1982, from £255,000 to £715,000, on turnover up by 40 per cent from £10.55m to £14.79m.

The group, mainly engaged in coach and car distribution, says a strong performance by the passenger service vehicle division made the main impact on sales. However, the car sales, repair, parts and manufacturing divisions also turned in improved results.

A net interim dividend of 4.8p per share is declared, up from 4.2p in the corresponding period.

Mr Charles Yeates, the chairman, says the increase in the group's liquidity at midway gives it a financial strength which will enhance competitiveness, and a good result for the full year is anticipated.

Tax took £21,000 (£15,000). Retained profits rose from £205,000 to £654,000.

The company's shares are traded on the market set up by M. J. H. Nightingale & Company.

Symonds profit recovers to £254,000

A recovery in pre-tax profits from £24,009 to £254,016 in the year to March 31, 1982, is reported by Symonds Engineering, helped by a £206,350 turnround in the second half to profits of £144,494.

Turnover of this precision engineer, sheet metal worker and jig and tool manufacturer rose by £200,000 to £2.9m in the year.

The dividend increased from 0.3p to 0.785p with a final of 0.5625p (0.0775p). Stated earnings per 5p share are up from 1.219p to 1.411p, after a tax charge of £110,281, against a credit of £100,530.

TR Trustees moves ahead to £2.87m

Net revenue of investment trust TR Trustees Corporation moved marginally ahead from £2.73m to £2.87m in the year to May 31 1982, while the stated earnings per 25p share rose from 3.02p to 3.19p.

The year's dividend is being raised to 3p net (2.95p) with a final of 1.9p (1.85p). Net asset value per share is given as 99.1p (101.9p).

Gross revenue advanced from £4.66m to £5.23m. At the half year stage net revenue had improved from £1.46m to £1.48m. The company was previously known as Trustees Corporation.

Oil and Assoc. slightly ahead to £609,640

Pre-tax revenue of Oil and Associated Investment Trust in the year to March 31 1982 lifted slightly from £592,550 to £609,640.

A final net dividend of 2.8p per 25p share is proposed, raising the total payout from last year's 3.5p to 3.85p. Earnings per share are stated at 3.89p (3.92p) and net asset value per share is put at 95p (109p) at the year end.

UK tax for the year took £192,829 (£180,758) and foreign tax £27,655 (£19,790).

George Dew at £910,000

PRE-TAX profits of George Dew emerged at £910,000 for the half year to May 3 1982 from turnover of £13.84m. Comparisons of £2.17m and £15.68m respectively are given but it is pointed out that these relate to the old George Dew and Co.

Tax took £456,000 £1.04m) and there was an extraordinary debit of £30,000 (nil) for listing expenses. An interim dividend of 2.3p is declared.

The chairman says that although the results show a reduction as compared with the figures for the old group last year, the nature of the group's business is such that recognition of profits is significantly affected by the timing of the completion of contracts.

He adds that although not directly comparable, the figures do illustrate the difficulty the company is experiencing in obtaining new work at sensible prices and its determination not to depart from its prudent policy with regard to tender margins.

The group, he says, "should produce satisfactory results for the full year as a consequence of completions of major contracts but, looking forward, the urgent task is to convert tender inquiries into useful contracts of larger value than have been obtained during the past six months."

The chairman comments that "interesting inquiries" have been received from abroad but the long-delayed upturn in the UK construction market is required to keep the whole resources of the group employed.

He concludes that in the absence of bank borrowings, the company is better placed than many to weather the foreseeable difficulties.

Earnings per share are given as 11.4p but this figure, it is pointed out, was on an anualised basis. The proportionate figure for the half year was 5.7p.

Associated Heat on target

PROFITS IN line with forecast were returned by Associated Heat Services for the year ended March 27 1982. At the pre-tax level, they emerged at £2.71m which was an increase of some 8.5 per cent on the £2.5m made in 1980-81 and an improvement of £67,000 on the estimate made in the offer for sale document—the company went public in May this year.

Sir Derek Ezra, the chairman, considers the results satisfactory in the context of the severe recession which has affected British industry. However, in view of the continuing economic uncertainties and the seasonality of the group's trade, he says it is too early to make any forecast for the current year.

Turnover for 1981-82 rose to £36.22m (£31.13m)—the group's business is that of offering a complete heat supply and management service, including the provision of air conditioning. It also operates contracts relating to coal, gas and oil-fired plants.

Tax took £994,000 (£1m) leaving profits of £1.71m (£1.5m) attributable to shareholders—£1.58m had been forecast.

Stated earnings per 25p share were 1.7p above forecast at an adjusted 24.1p, and compare with 21.3p the previous year. They were adjusted to reflect the effects of flotation.

Dividends aggregating £300,000 at the rate of £1 per share were paid to shareholders before the offer for sale: no further dividends are proposed for 1981-82.

The chairman says he believes major users of energy, particularly in the industrial field, will need to look increasingly for outside professional expertise to maximise efficiency as fuel costs continue to rise, adding that the group is well placed to provide that expertise.

The group went public via a tender offer of 3.2m shares. The tender was three and a half times oversubscribed. Its two founding shareholders, the National Coal Board and Compagnie Generale de Chauffe, the French heat management service company, each retained a 30 per cent stake.

On a CCA basis taxable profits totalled £2.02m (£2.01m).

Recovery at G. M. Firth

ACTION AT steel stockist and property developer G. M. Firth (Holdings) to rationalise the stockholding business, reduce overheads and replace non-income bearing properties, brought about a turnround from taxable losses of £52,996 to profits of £186,251, in the year to March 31 1982. Turnover advanced by 46 per cent, from £2.37m to £3.47m.

At the half year stage the group had already produced pre-tax profits of £37,000 compared with £57,000 previously.

The final dividend is being maintained at 1.5p net per 10p share making a same again total of 3p. Earnings per share are given as 6.43p (0.48p losses).

Mr Ian Wasserman, chairman, says the group is now firmly based for expansion and the directors look to the current year with confidence.

Turnover of the steel stockholding subsidiary Clarke's of Stillington increased by 27 per cent and profits were up from £15,048 to £133,844. The rationalisation of this operation is completed, he says, and the company can concentrate once again on increasing its customer base and expanding turnover.

The industrial property market remained depressed, especially in the North and Midlands and during the year the group disposed of a number of property assets which were non-income-bearing. Since the year-end further trading properties have been disposed of, realising around £325,000.

Subsequent to the year-end the group has acquired a 12.2 per cent shareholding in Howard Tenens Services, whose major assets comprise freehold land and buildings. As recently announced, there have been bid talks between Howard Tenens Services and Crest International Securities, and the directors are maintaining a close review of this situation.

Tax took £14,589 (£40,147 credit) and in the previous year there was deferred tax written back of £448,800. After extraordinary debits of £21,999 (£24,382), attributable profits amounted to £149,663 (£411,569). Dividends absorb £80,070 (same), leaving retained profits of £69,593 (£331,499).

UK COMPANY NEWS

BIDS AND DEALS

Berisfords inserts equity as Commission ponders

BY RAY MAUGHAN

S & W Berisford has inserted a part equity alternative into its £282m cash bid for sugar beet procesor, British Sugar Corporation. The terms of this new share element are very much in line with Berisford's closing market price of 137p, up 2p yesterday, for the bid now contains the right to elect for one new Berisford share fo revery 135p of the 470p cash terms.

The share alternative is incorporated into Berisford's formal offer document, but as the bid was despatched last night, neither side was entirely sure of the exact position of the European Commission in relation to Article 86 of the Treaty of Rome, which deals with any abuse of a dominant position in a community market.

The competition, directorate has informed Berisford that it still reserves its position on the offer despite the bidder's earlier clear understanding that British Sugar's evidence to the Commission would not stand in the way of a takeover.

It is understood that the directorate is preparing to make an interim judgment today on new evidence presented by the beet group and a third party, although it is by no means certain whether this would add up to anything more than a stay of execution.

The acquisition of a 10.5 per cent holding in British Sugar from Ranks Hovis McDougall is conditional on the approval of Berisford shareholders before August 9, and no new reference to the Monopolies Commission before completion of the purchase.

Accordingly, Berisford will be seeking its shareholders' consent at an extraordinary meeting on July 30.

If the share elections were to be made in respect of all the cash consideration payable for the British Sugar shares for which the offer is accepted, Berisford said, each accepting British Sugar shareholder would receive two new Berisford shares and 200p in cash for each British Sugar share.

Berisford made it clear that it had not changed its view that British Sugar's 14.7 per cent stake in RHM has "no commercial justification" and intends to place the holding "when market conditions are appropriate."

Despite British Sugar's vehement objection to the bid and its efforts to enlist the Takeover Panel to its cause, an attempt which it admitted last night had run into "a dead end," Berisford has "requested the board of British Sugar to convene an extraordinary meeting of British Sugar to reorganise its share capital in order to reduce the cost to Berisford of implementing the offer."

Pioneer Concrete offers 155p cash for Mixconcrete shares

Pioneer Concrete (Holdings), ultimate parent company of which is Pioneer Concrete Services (PCS) of Australia, is making a 155p cash bid for each *Mixconcrete (Holdings) ordinary* share Pioneer does not already own. Pioneer currently holds 105,000 Mixconcrete shares.

The offer which values Mixconcrete's share capital at £14.4m, represents a premium of 36 per cent over the middle market price on Wednesday—Mixconcrete shares closed yesterday at 178p, a rise of 63p on the day.

The directors of Mixconcrete strongly advise shareholders to take no action in relation to their holdings, and will be writing to them shortly.

Pre-tax profits of this Northampton-based ready mixed concrete, sand and gravel group dropped from £1.6m to £50,388 for the year ended November 30 1981, but the dividend was maintained at 4.05p net per share. Turnover was down from £45.47m to £42.89m.

In their annual report last March, the directors said that there were signs that an air of confidence was returning to the construction industry and with the trend towards lower interest rates, they were cautiously optimistic that activity in the industry would be stimulated.

PCS is based in Sydney, Australia, and is engaged in the production and marketing of building products, principally in Australia, the UK, U.S., Italy, Spain, Israel and Hong Kong.

Since commencing operations in the UK in 1962, Pioneer, holding company for the UK activities, has expanded rapidly and now has some 140 operating sites engaged in the extraction of aggregates and in ready mixed concrete production, the directors explain.

The PCS group's pre-tax profit—but after minority interests—was A$89.2m for the year ended June *30 1981 and amounted to* A$46.1m (33.4m) for the six months to December 31 1981.

The directors point out that Mixconcrete operates in geographical areas of the UK where Pioneer does not have significant representation, and the *acquisition of the company* would be a logical step in the expansion of Pioneer's UK activities.

They add that because of the minimal overlap of operations between the two companies, only limited rationalisation is envisaged.

Pioneer is being advised by Hambros Bank, and formal offer documents will be despatched as soon as possible.

Mercantile House in £4.8m sale

Mercantile House Holdings, the UK money-broking group, yesterday announced the sale of its Far East interests to the local management team for £4.8m cash.

Mercantile House has agreed the sale of Charles Fulton (Hong Kong), Charles Fulton (Singapore) and its 40 per cent holding in Charles Fulton (Malaysia) to a holding company owned principally by the present management. *Local interests* own the rest of the Malaysian operation.

The assets involved had a net book value of about £800,000 on March 31. The deal is due to be completed in August.

This deal follows the sale, in May, by Mercantile House of Fulton Packshaw, the sterling money broking arm of the Charles Fulton group, to its management for £700,000.

These two sales bring the value of disposals to £5.5m compared *with the £6.5m paid by* Mercantile House in March for the entire Charles Fulton group.

"We are entirely sympathetic to management buy-outs," said Mr John Barkshire, the Mercantile House chairman. "It is possible there will be more but nothing is planned at the moment."

The Far Eastern interests, which employ between 50 and 100 people, have been taken over by a group of managers headed by Mr BobPhelan, who lives in *Singapore.*

CU sells Danish subsidiary for £1.3m

Commercial Union Assurance Company is selling its Danish subsidiary **Forsikrings-Aktieselskabet Vidar** to the Danish insurance group **Forsikringsaktieselskabet Hafnia** for DKr 19m (£1.3m) cash.

Shareholders' funds of Vidar in 1981 were DKr 16m (£1.1m) and gross premiums income was DKr 60m (£4.1m).

The deal represents a further move by CU in the rationalisation of its overseas operations. It was decided that Vidar was too small to be able to compete successfully for insurance business in the future. As in other countries, CU has tied up in Denmark with a large group.

Hafnia is the second largest insurance group in Denmark, with non-life net written premiums of £85m and life premiums of £63m.

CU has had a close relationship with Hafnia for many years and to strengthen these ties, CU will acquire up to 2 per cent of Hafnia and will issue to Hafnia new CU shares of equivalent market value. This will be satisfied by the issue of about 600,000 CU shares at a current market value of about £800,000.

Mr Leslie Hammick, general manager of CU's overseas division, said Hafnia and CU intended to pursue a policy of co-operation and had already signed a technical assistance agreement relating to large commercial and industrial risks. Vidar will be appointed CU's *general agent to manage its* Danish branch insurance business.

CONSULT ACQUIRES FINANCE COMPANY

Consult International (Mr R. A. Shuck), through its wholly-owned subsidiary North Wales Trust has acquired 98 per cent of the **Portsmouth Finance Corporation.**

WM. PICKLES SUBSIDIARY SOLD

Mr Henry Butt and Mr Paul Hainsworth of Price Waterhouse, the receivers of **William Pickles**, have announced that the business assets of Freeman and Son, a subsidiary, have been sold to R. Mould of Nottingham.

The business will continue to trade under the name Freeman Fabrics.

CHRISTY BROS.

Christy Bros. has purchased from **Beken Engineering** various fixed assets comprising plant and equipment, together with the stock and work in progress and design rights and liabilities, for £72,000 (book value). This is made up of £30,000 cash and an estimated £42,000 of reorganisation expenses to be incurred in the next few months.

Excluding one special contract, turnover of Beken for the year to May 31 1982 was about £250,000 and the company made a nominal profit.

PANTHER SECS.

The Stock Exchange has cancelled the listing of both the preference and the ordinary shares in **Panther Securities** but has agreed to allow matched bargains in the shares to take place under the provisions of SE Rule 163 (2).

Out of court settlement in Christopher Moran case

By John Moore, City Correspondent

Christopher Moran and Co., the insurance broker and part of the Christopher Moran Group, has reached an out of court agreement with *Willis Faber and* **Dumas (Agencies)** and other parties relating to a long running insurance litigation.

In the settlement Christopher Moran and Co is believed to have received over £150,000. In the original legal action Christopher Moran had been suing Willis Faber and Dumas (Agencies), J. D. Boyagis (Underwriting Agencies), Barder and Marsh, Lloyd's underwriting syndicates 158, 451, 931, 635, and 648. The second to seventh defendants have made payment to Christopher Moran and Co.

The payments represent costs, interests and brokerage.

Trust Secs. edges ahead to £442,000

Taxable profits of **Trust Securities Holdings** edged ahead from £430,000 to £442,000 for the six months to May 31 1982 inspite of a £1.44m drop in turnover to £3.11m. The net interim dividend is maintained at 0.71875p per *10p share*—a total equal to 1.96875p was paid for 1980/81 after adjusting for a sub-division of the shares from 40p.

Stated earnings per share were 6.3p (6.2p) or 1.6p (1.5p) calculated before goodwill written off.

Tax took £20,000 (same) leaving the net balance at £422,000 (£410,000).

The company has completed the letting of No. 1 Francis Grove, Wimbledon, to a subsidiary of a major international oil company and has subsequently let its major development of 39,000 sq ft at Spring Gardens. *Manchester, to Tootal* at a record rent for the area.

Other developments are proceeding well and a report on the outcome of the company's negotiations with the GLC regarding Stockley Park is due soon.

Burtonwood rises and pays more

An advance in *pre-tax profits* from £2.76m to £2.88m is reported by **Burtonwood Brewery Company (Forshaws)** for the year ended March 31 1982. Turnover also improved, rising from £16.43m to £18.3m.

Stated earnings per 25p share rose by 3.1p to 39.8p and the dividend total is being increased to 5.757p net (5.192p) by a final of 3.797p. Tax took £1.16m (£1.17m).

Tribune Inv. Trust makes £0.8m pre-tax

FOR the half year to June 30 1982, gross revenue of **Tribune Investment Trust** amounted to £908,000 and pre-tax revenue came to £836,000. For the same period last year, the respective figures were £771,000 and £705,000. The directors point out that figures are not comparable because of the incidence of dividend payments.

Earnings for ordinary holders were £492,000 (£422,000 before exchange credit of £24,000) and earnings per 25p share were shown at 1.92p (1.65p). The

Romney Trust midway decline

For the six months to June 30 1982 after tax profits at **Romney Trust** declined from £657,000 to £593,000. The interim dividend has been held at 1.5p net.

First-half gross revenue for the current year came to £1.25m (£1.37m). After tax of £379,000 (£415,000) earnings per 25p share were given as slipping from 2.35p to 2.02p.

Net asset value was stated as 165.1p (179p) or, assuming full conversion of loan stock, 164.5p (178.1p).

interim dividend is increased *from 0.3p to 0.5p—last year's* total was 3p on £1.6m pre-tax revenue.

NEW LIFE BUSINESS

Sun Life decline in group pensions

THE DECLINE in group pension operations has severely restricted the new business *growth of* **Sun Life Group** during the first half of this year. New annual premiums dropped nearly 3 per cent to £17.1m, while single premiums fell 2 per cent to £34m.

Annual premiums on group busines were cut from £6.3m to £3.9m, *though single premiums* rose from £1.4m to £1.6m. Mr Richard Zamboni, Sun Life's managing director, said this decline was not unexpected in view of the lower levels of pay settlements and reduction in numbers of employees as members of pension schemes.

The company did well on individual life and pensions. Annual premiums on ordinary traditional life rose 16 per cent to £4.9m, while single premiums on this business jumped 13 per cent to £7.8m, thanks to a continued good business in immediate annuities.

Traditional executive pension schemes improved over the period with annual premiums rising by more than 10 per cent to £3.4m and single premiums from £2.3m to £2.5m. However, traditional self-employed pension business was mixed, with annual premiums rising 13 per cent to £428,000, but single premiums dropping nearly 30 per cent to £1.5m.

The company's unit linked operations showed a two-thirds jump in annual premium business from £2m to £3.3m. Ordinary life premiums rose 43 per cent to £1.4m, and executive pension more than doubled to £1.4m. But self-employed pension premiums remained static at £487,000.

Linked "single" premiums remained unchanged at £12.8m, with a 20 per cent drop in life bond business to £7.5m being made up by a 44 per cent rise in self-employed premium to £3.8m and a doubling in executive *pension business to £1.4m.*

Satisfactory growth for Equity & Law

Satisfactory growth in new life and pensions business during the first half of 1982 is reported by **Equity and Law Life Assurance Society.** New annual premiums rose by one-fifth from £9.2m to £11m and single premiusm by a similar proportion from £13.7m to £16.3m. New sums assured improved by 16 per cent from £576m to £670m.

The society's individual business was good with new annual premiums jumping by one quarter to £10.2m, against £8.1m, and single premiums by 30 per cent to £14.6m (£11.2m).

Individual pensions business was particularly buoyant with self-employed pensions up 60 per cent and executive pensions nearly 40 per cent.

The company did much better on its traditional business, compared with its unit-linked operations. The linked annual premiums improved around 5 per cent to £1.5m and single premiums by 10 per cent to £1.5m also.

Annual premiums on insured pensions business rose from £500,000 to £800,000, much of this success coming from the launch of the new money purchase retirement savings scheme.

The society wrote 57 new schemes in the period, against 13 last year. Other group pensions business was dull, however, with the managed fund being particularly affected — annual premiums were down from £600,000 to virtually nil and single premiums were cut by one third from £1.8m to £1.2m.

Overseas, the society recorded a 22 per cent increase in individual business in Holland despite continuing stiff competition, and doubled its business in Germany.

MINING NEWS

Guinea diamond venture due to start in 1984

BY KENNETH MARSTON, MINING EDITOR

TWO YEARS ago this column reported a new diamond mining venture planned for Guinea which aimed to sell its output outside the auspices of the big De Beers' Central Selling Organisation which handles the marketing of some 80 per cent of world diamond production.

Although little has been heard of the venture in recent times a reminder that it is still pressing on comes with the news that Wardpower, the electrical generator division of the Sheffield-based Thos. W. Ward (Industrial Supplies), has won a £2m contract for the supply of electrical power to the West African diamond project.

The management company for the diamond venture is Aredor Services in which the Republic of Guinea has 50 per cent, Australia's Bridge Oil 45 per cent, Simonius Vischer of Basle 2½ per cent and Jack Lunzer's Industrial Diamond Company of London with the remaining 2½ per cent. The operating company is Aredor Guinea.

Two years ago the capital cost of the venture was put at $70m and this has now escalated to $80m of which some $20m has so far been spent and further sums have been committed.

Because of adverse weather conditions mine construction has been delayed but subject to satisfactory financing arrangements being concluded the operation could come on stream in early 1984.

Aredor is hopeful of achieving an output of some 250,000 carats in the first year of production from the treatment of 400,000 cubic metres of diamondiferous gravels.

By 1986 the company will be able to work some 1m cubic metres and providing that the prospecting results bear out the present promise this could, of course, boost the caratage.

This would still be very small by De Beers' standards, but it should be remembered that West African diamond deposits, such as those in Sierra Leone, have a high gem quality content.

Aredor's calculations have been based on the conservative price valuation of $185 per carat, but this does not take into account stones of over 10 millimetres in size and they can range up to around 60 mm.

The non-Government shareholders of Aredor will handle the marketing of 70 per cent of the gem output and 50 per cent of that of the industrial quality diamonds.

This is where Mr Lunzer comes in with his Aredor Sales which is managed by Industrial Diamond Company; the latter already purchases a portion of the diamond output of Sierra Leone and Zaire.

It is left to the Guinea Government to decide on how the balance of the diamonds is to be sold. What remains to be seen, however, is how successful the overall marketing arrangement will be in competition with the activities of De Beers and against the background of demand for diamonds generally which, at present, is particularly weak as far as the better quality gems are concerned.

EUROPEAN OPTIONS EXCHANGE

Series	Aug. Vol.	Aug. Last	Nov. Vol.	Nov. Last	Feb. Vol.	Feb. Last	Stock
GOLD C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$349.50
GOLD C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GOLD P	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ABN C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL VOLUME IN CONTRACTS 3836							

A=Asked B=Bid C=Call P=Put

BANK RETURN

	Wednesday July 14 1982	Increase (+) or Decrease (—) for week
BANKING DEPARTMENT		
Liabilities	£	£
Capital	14,553,000	—
Public Deposits	54,843,867	+ 12,575,959
Bankers Deposits	498,936,413	+ 73,402,204
Reserve and other Accounts	1,939,578,992	+ 16,727,422
	2,507,911,272	+ 102,705,595
Assets		
Government Securities	624,077,638	+ 97,987,333
Advances & other Accounts	1,198,067,349	— 30,482,900
Premises Equipment & other Secs.	658,809,977	+ 23,675,524
Notes	26,586,922	+ 11,521,036
Coin	369,386	+ 4,602
	2,507,911,272	+ 102,705,595
ISSUE DEPARTMENT		
Liabilities	£	£
Notes issued	10,925,000,000	+ 75,000,000
In Circulation	10,898,413,078	+ 63,478,964
In Banking Department	26,586,922	+ 11,521,036
Assets		
Government Debt	11,015,100	—
Other Government Securities	3,975,728,339	— 282,633,374
Other Securities	6,938,256,561	+ 357,633,374
	10,925,000,000	+ 75,000,000

LONDON TRADED OPTIONS

July 15 Total Contracts 1042 Calls 757 Puts 285

Option	Ex'rcise price	July Closing offer	July Vol.	Oct. Closing offer	Oct. Vol.	Jan. Closing offer	Jan. Vol.	Equity close
BP (c)	260	13	25	26	9	52	—	268p
BP (c)	280	3	10	15	6	22	—	"
BP (c)	300	1	—	7	5	14	9	"
BP (c)	330	¾	2	4	—	7	—	"
BP (p)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CU (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cons. Gld (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cons. Gld (p)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ctlds. (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GEC (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GEC (p)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gr'd Met. (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ICI (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ICI (p)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Land Sec. (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mks & Sp. (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shell (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shell (p)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		August		November		February		
Imperial (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Imperial (p)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lasmo (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lonrho (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Racal (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
RTZ (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
RTZ (p)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Vaal Rfs. (c)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

C=Call P=Put

DIVIDENDS ANNOUNCED

	Current payment	Date of payment	Corre-sponding div.	Total for year	Total last year
Asprey and Co	27	—	20	42	35
Assoc. Newspapers int.	4.5	Aug 26	4.5	—	10.4
Braithwaite	5.1	—	4.7	8.1	7.7
Burtonwood Brewery	3.8	—	3.33	5.76	5.19
Cap. Res. Fund§ int.	3.5	Aug 20	3.3	—	3.3
George Dew int.	2.5	Sept 24	—	—	—
Distillers	5.75	—	7.75	11.75	10.75
Dowty Group	2.15	Oct 15	1.87*	3.7	3.33*
Eurotherm Intl. int.	2	—	1.5	—	5
G. M. Firth	1.5	Oct 1	1.5	3	3
Great Universal	5.25	Dec 20	8	13	12.5
Greycoat Estates	1	—	0.37	1	0.37
Haslemere Estates	3.25	Oct 7	4.56	6.9	6
Howden Group	2.54	—	2.67	4.4	4
Jones, Stroud	3.2	Oct 16	3.2	5.2	5.2
London and Midland	4.85	—	4.85	7.75	7.75
Marling Inds.	0.61	—	0.52	1.05	0.94
Oil and Assoc.	2.5	Aug 26	2.45	3.85	3.5
Romney Trust int.	1.5	Aug 27	1.5	—	4.4
Symonds Eng.	0.59	—	0.05	0.79	0.3
Tex Abrasives	2.5	—	2.5	3.25	3.25
Thorn EMI	10.55	—	10.55	14.63	14.63
TR Trustees	1.5	Sept 17	1.55	3	2.95
Tribune Invest. Tst. int.	0.9	—	0.8	—	3
Uolgate	4	Oct 1	4	6.5	6.2
Vosper int.	2	Sept 4	1	—	4
Wheeler's	4.33	—	4.33	5.88	5.88
Yeoman Trust	2.5	Sept 15	2.5	—	6.76

Dividends shown in pence per share net except where otherwise stated.

* Equivalent after allowing for scrip issue. † On capital increased by rights and/or acquisition issues. ‡ USM Stock. ¶ Final not less than 2p forecast. § Gross throughout.

BASE LENDING RATES

A.B.N. Bank	12 %
Allied Irish Bank	12 %
Amro Bank	12 %
Henry Ansbacher	12 %
Arbuthnot Latham	12 %
Associates Cap. Corp.	13 %
Banco de Bilbao	12 %
BCCI	12 %
Bank Hapoalim BM	12 %
Bank of Ireland	12 %
Bank Leumi (UK) plc	12 %
Bank of Cyprus	12 %
Bank Street Sec. Ltd.	13½%
Bank of N.S.W.	12 %
Banque Belge Ltd.	12 %
Banque du Rhone et de la Tamise S.A.	12½%
Barclays Bank	12 %
Beneficial Trust Ltd.	13 %
Bremar Holdings Ltd.	13 %
Brit. Bank of Mid. East	12 %
■ Brown Shipley	12 %
Canada Perm't Trust	12 %
Castle Court Trust Ltd.	12½%
Cavendish G'ty T'st Ltd.	14 %
Cayzer Ltd.	12 %
Cedar Holdings	12 %
■ Charterhouse Japhet	12 %
Choulartons	12 %
Citibank Savings	12¼%
Clydesdale Bank	12 %
C. E. Coates	12½%
Comm. Bk. of Nr. East	12 %
Consolidated Credits	12 %
Co-operative Bank	*12 %
Corinthian Secs.	12 %
The Cyprus Popular Bk.	12 %
Duncan Lawrie	12 %
Eagil Trust	12 %
E.T. Trust	12½%
Exeter Trust Ltd.	13 %
First Nat. Fin. Corp.	15 %
First Nat. Secs. Ltd.	14 %
Robert Fraser	13 %
Grindlays Bank	12 %
■ Guinness Mahon	12 %
■ Hambros Bank	12 %
Hargrave Secs. Ltd.	12 %
Heritable & Gen. Trust	12 %
■ Hill Samuel	§12 %
C. Hoare & Co.	†12 %
Hongkong & Shanghai	12 %
Kingsnorth Trust Ltd.	13 %
Knowsley & Co. Ltd.	13½%
Lloyds Bank	12 %
Mallinhall Limited	12 %
Edward Manson & Co.	13½%
Midland Bank	12 %
■ Samuel Montagu	12 %
■ Morgan Grenfell	12 %
National Westminster	12 %
Norwich General Trust	12 %
P. S. Refson & Co.	12 %
Roxburghe Guarantee	12½%
Slavenburg's Bank	12 %
Standard Chartered	‖12 %
Trade Dev. Bank	12 %
Trustee Savings Bank	12 %
TCB	12 %
United Bank of Kuwait	12 %
Volkskas Intl. Ltd.	12 %
Whiteaway Laidlaw	12½%
Williams & Glyn's	12 %
Wintrust Secs. Ltd.	12 %
Yorkshire Bank	12 %

■ Members of the Accepting Houses Committee.
* 7-day deposits 9%, 1 month 9.25%. Short term £8,000/12 month 11.8%.
† 7-day deposits on sums of: under £10,000 9%, £10,000 up to £50,000 9½%, £50,000 and over 10¼%.
‡ Call deposits £1,000 and over 9%.
§ 21-day deposits over £1,000 10%.
‖ Demand deposits 9%.
¶ Mortgage base rate.

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COMMODITIES AND AGRICULTURE

UK fowlpest rules declared illegal

BY LARRY KLINGER IN BRUSSELS

THE EUROPEAN COURT ruled yesterday that Britain's restrictions on Continental poultry imports were illegal. The "turkey war" health regulations have for nearly a year effectively banned the bulk of poultry imports from Continental producers.

Britain will now be under considerable pressure to amend its rules before the Christmas poultry season, which had become an increasingly lucrative business for Continental farmers, especially for the French, before the UK introduced its emergency measures late last summer.

The Commission is seeking immediate talks with Britain and the two main exporting countries, France and the Netherlands, in an attempt to reach a solution to the problem by September, the crucial month for the placing of export orders for the Christmas season.

UK Government officials in London, while expressing disappointment that their case had been rejected, said they were still awaiting receipt of the full

Britain's National Farmers' Union said that it believed that the UK regulations were "entirely justifiable on health grounds, bearing in mind our island status and our reputation for healthy stock which is second to none, and we shall be considering what steps to take to maintain the benefits which the current policy has achieved."

The Anglo-French "turkey war" broke out last summer after a spectacular growth in French poultry sales to Britain, a trade estimated by the Commission to have increased in value from 28,000 European units of account in 1979 to 4.8m in 1980 (about £15,700 and £2.7m respectively at current rates).

Following widespread protests by British farm workers claiming that their jobs were being endangered by unfairly subsidised turkey exports, Britain in September introduced a compulsory slaughter policy to deal with any future outbreaks of Newcastle disease, a viral infection more generally known as fowl pest.

In yesterday's judgement, the Court did not deny Britain's right to take measures to protect its poultry against Newcastle disease, but ruled that new measures were "excessive" on purely health grounds, suggesting that "the real aim . . . was to block, for commercial and economic reasons, imports of poultry products from other member states, in particular from France."

The Court rejected British arguments that its new regulations were the "only possibility" open to it on health grounds, saying that there were obviously "less stringent measures for attaining the same result."

While the Commission now plans to act speedily in its contacts with the UK and the main exporters, it is still far from certain how quickly new arrangements can be agreed and implemented. "A lot must depend on Britain's good will," one Commission official said.

U.S. bankruptcy bill passed

WASHINGTON — Congress gave final approval to a Bill that clarifies and broadens protection of commodities and *securites markets in the event* of a bankruptcy of an investor.

The measure allows liquidation of a commodities contract or forward contract. The liquidation of a securities contract could not be prevented unless an order is granted under existing securities laws.

"The prompt closing out or liquidation of such open *accounts freezes the status quo* and minimises the potentially massive losses and chain reactions that could occur if the market were to move sharply in the wrong direction," the House *report on the Bill said.*

The Bill also ensures that the bankruptcy trustee's powers are not used to permit margin or settlement payments to be set aside except in cases of fraud.

Reuter

Concern at Dairy Crest losses

BY A CORRESPONDENT

THE ANNUAL report of the Milk Marketing Board of England and Wales reveals a substantial loss by Dairy Crest the board's dairy product marketing division. The size of the loss is not clear from the report, but it could be as high as £3.5m on a turnover of £775m.

The result reflects the highly competitive nature of the dairy product market. But the MMB performance compares very unfavourably with that of competing commercial companies such as Unigate and Express Dairies, who pay the same price for their raw material.

It is certain to draw more criticism of the MMB's purchase of most of Unigate's creameries nearly three years ago, which are now responsible for the bulk of Dairy Crest's output.

The MMB's annual report shows a Dairy Crest trading profit of £17.1m for the year ended March 31, £3.1m less than the year before. But the company had to pay £12.8m interest to the MMB and £5.6m interest on other borrowings. This produced net loss for the year of £770,000 compared with last year's profit of £455,000.

The main reason for the poor result was the collapse of the cheese market in the spring. In addition, due to bad weather, milk supplies to Dairy Crest were nearly 1 per cent down

Another problem was last year's foot-and-mouth disease outbreak which eliminated UK products from several overseas markets. Most significantly it stopped the promising export of skim milk powder to Mexico.

Depressed sugar outlook

By Terry Povey

AN INCREASED prediction for world sugar production and a 1.41m tonne rise in stocks forecast for the end of *the 1981-82 season led to a* **drop in prices on the London futures market yesterday. The October position fell to £130.4 per tonne, down £9.50 from the previous day's close.**

West German statistician F. O. Licht in its latest forecasts put world sugar production at 98.65m tonnes, up 1.14 on its previous estimate, and consumption at 90.3m tonnes, down against 444,000 tonnes on earlier figures.

On this basis the sugar analysts are expecting that by the end of this crop year, August/September, carryover stocks will reach the record level of 32.77m tonnes.

Yesterday's fall ended a period of slowly rising prices that had run since early June. Traders expect that the underlying bearish picture reflected in the Licht estimates could well now reassert itself in the market.

Reports of substantial Philippine sales and Chinese purchases had combined with technical resistance to any easing of prices earlier in the week but traders' overall expectations yesterday were of continuing nervousness in the *market until* the results of the European beet tests are known at the end of this month.

Copper values fall back

By Our Commodities Staff

COPPER PRICES fell back on the London Metal Exchange in what dealers saw as a technical correction following the recent strong upsurge. The cash high grade price, which had risen £77 in the previous seven trading days, was quoted £10 down at £843.50 a tonne at the official LME close, although it steadied somewhat in after hours dealings.

The market, which had been lifted by reports of Chinese buying, was depressed yesterday morning by Japanese selling.

The price upsurge was actually halted on Wednesday after the cash metal had traded at £862 a tonne.

FARMER'S VIEWPOINT

Farming à la Russe

A fact worth bearing in mind, is that *when the* Turks closed the Dardenelles in 1914, some 370 grain ships were locked into the Black Sea. They had been awaiting the Russian harvest.

Today those same *ships would* probably be bringing grain to the Soviet Union. Even until the early 1970s, the Soviet Union had been on balance an exporter rather than a substantial importer of grain. But since 1972 imports have soared, rising to 42m tonnes in 1981-82.

Accrding to J. H. Parrotte, Director General of the International Wheat Council, they are likely to average 30m tonnes annually in the years ahead. He was speaking at a Resource Surveys conference on "The Soviet Union and the World's Commodity Markets in the 1980s," in London last week.

Mr Parrotte's paper underlined the main lesson of the conference, which was that the Soviet's interest in commodity trading was to secure foreign exchange with which to buy food.

For that reason they have been mining gold, diamonds and metals in Siberia under some of the world's harshest physical conditions. There sales are not governed by actual market conditions, but by the need for foreign exchange at certain periods to sustain themselves and their satelite countries.

One speaker even questioned the real need of the Soviet Union to export natural gas through the projected pipeline to Western Europe. Within a few years, he claimed, the country's *oil reserves could be running* low, and the gas would be needed at home. Of course a trans-Russian gas pipeline would in that case be handy for bringing it to Western Russia.

The general view of the speakers was that the continuance of these exports was entirely dependent on the degree of failure to replace soaring food imports with home production. Mr Brezhnev and his Government recognise this, and have planned a food programme for the decade until 1990. This concentrates on replacing these imports and in particular, to improving the supply of meat and milk products.

To that end it is planned to raise fixed production assets in farming by 50 per cent and inorganic fertilisers by 70 per cent, together with a substantial investment in the processing and distribution of food between the farm and the shops. Incentives will have to be given to members of the state and collective farms, to become more efficient.

But it is one thing to produce a farming plan and quite another to get it executed. Nor does a *mass* of fertiliser, machinery, seed and labour, necessarily guarantee a single extra bushel of wheat or kilo of beef. Farming needs the application of some basic human skills, which *seem to have been* suppressed under the Communist system as it is practised in Russia.

I specify Russia, because in China, Communism is essentially feeding a population four times as large as the USSR from a much smaller area, with the application of massive manpower and considerable farming skills. There is virtually no mechanisation on Chinese farms.

In Poland, in spite of a large private farming sector, food imports are a considerable burden, and in the Danube basin countries, once grain exporters, imports are needed.

Hungary is often quoted as the ideal compromise, with a large private and co-operative sector. Most livestock production is in private hands. But Hungary is a small country with a fairly relaxed political system and the farming is up to date, with access to the best of Western knowledge.

But even here some things can go wrong. On one of the few state farms I visited was a sheep breeding project. This contained in its conception and execution, almost every mistake, both practical and economic, that came to mind. I pointed some of them out to the official who showed me round, who pooh poohed the ideas, as indeed he had every right to do.

When I revisited the same area some three years later I asked to see them again. Things had not gone to plan. The originator was a scientist, and the last thing for a scientist to get his hands on *is a practical project.* If he is backed by the full weight of government, as in a Communist state, his capacity for multiplying his errors is unlimited.

In Hungary there are still some individuals in power who would have knowledge of the need to question the official line on farming practicalities. But in Russia, after 65 years of *centralised policy making, there* is no basis of comparison. The Russians, as one speaker told us, have replaced the recession-prone capitalist economies with inefficiency, low productivity *and over manning. Even where,* as in farming, the basic knowledge is there at the top, it cannot get applied at grass roots level because of the inflexibility of the regime. Western farmers selling to the Soviets trust the Russians never learn to do otherwise.

John Cherrington

Campaigners seek end to whaling

BY RICHARD MOONEY

RENEWED EFFORTS to bring and end to whaling will be made at the annual meeting of the International Whaling Commission, which opens in Brighton next Monday.

Last year a call for a moratorium failed narrowly to win the required 75 per cent support, but campaigners are hopeful that the whalers will be defeated this year.

At a joint Press conference held by the various anti-whaling groups in London yesterday, Sir Peter Scott, well-known naturalist and a member of the UK delegation to the IWC, declared: "We do not know enough about whales to go on killing them."

One species after another had been brought to the brink of extinction, Sir Peter said. The annual catch had been *reduced from 46,000 to 14,000* in the past ten years, he noted, but this was "not good enough."

Mr Jean Paul Forton-Gouin, scientific adviser to the St *Lucia delegation*, cast doubts on the reliability of the data used by the IWC's scientific committee in making its recommendations. Most of this was supplied by Japan, the world's leading *whaling nation. Japan's* refusal to allow the committee access to its original data tended to confirm suspicions that the information put before the committee had been "selected."

"Science is being replaced by politics," Mr Forton-Gouin claimed. He said it was suspicious that scientists from whaling countries on the 90-member committee seemed always to interpret the evidence in a way that supported their government's policies.

Mr Forton-Gouin's doubts about the value of available scientific data were shared by Mr William de la Mare, a member of the scientific committee. He criticised the crude methods used for assessing whale populations which in general gave no warning of a decline unti "the final collapse."

This year the conservationists are calling for a "cessation of whaling instead of the "moratorium" or "ban" sought in previous years. It is thought, for some reason, that this word will *be found less objectionable.*

But whatever it is called the fear remains that a whaling ban could drive whaling countries out of the IWC and so beyond the influence of the anti-whalers.

Farm loans rate reduced

By Our Commodities Staff

THE Agricultural Mortgage Corporation has reduced the rate of interest for new variable rate loans with effect from today. But the new rate of 14 per cent, down from 14.75 per cent, will not benefit existing borrowers yet. The next quarterly review date for existing variable rate loans is September 1.

The rate for new fixed rate **loans remains at 15 per cent AMC yesterday confirmed the appointment of Mr John Page as chairman. Mr Page, until this year an executive director of the Bank of England, takes over from Mr John Glyn, AMC chairman for 18 years, who is retiring. Mr Page is also a director of the Nationwide Building Society**

LONDON OIL SPOT PRICES

	Latest	Change + or −
CRUDE OIL—FOB ($ per barrel)		
Arabian Light	31.50	−0.55
Iranian Light	30.75-31.25	+0.25
Arabian Heavy	29.50	−0.50
North Sea (Forties)	33.50	−0.75
African Bonny Li'ht	34.00-34.40	−0.45

PRODUCTS—North West Europe	CIF ($ per tonne)	
Premium gasoline	335-345	−1.0
Gas oil	262-271	−1.5
Heavy fuel oil	162-168	−2.0

GOLD MARKETS

Gold rose $¼ to $349½-350¼ in the London bullion market yesterday. It opened at $346½-347½ and was fixed at $347.75 in the morning, and $350.25 in the afternoon. Gold touched a peak of $353-353½, and a low point of $345½-346.

In Paris the 12½ kilo gold bar was fixed at FFr 76,500 per kilo ($342.75 per ounce) in the morning, *compared with FFr 76,500* ($343.09) in the afternoon, and FFr 74,300 ($334.86) Tuesday.

In Frankfurt the 12½ kilo bar was fixed at DM 28,070 per kilo ($349.72 per ounce), against *DM 28,380 ($354), and closed at* $350-351 compared with $352½-353½.

GAS OIL FUTURES

Prices fell further in early trading on bearish U.S. stock figures. Political *nervousness encouraged commission* house buying, pushing the market higher and a strong New York opening reinforced the move, reports Premier Man.

Month	Yest'day's close	+ or −	Business Done
	$ U.S. per tonne		
July	268.50	−1.50	269.50-65.50
August	274.50	−2.75	274.75-68.75
Sept.	274.75	+2.50	274.75-69.25
Oct.	276.75	−1.75	276.75-71.75
Nov.	278.25	−1.25	276.00-74.00
Dec.	279.50	−1.00	279.50-75.00
Jan.	280.50	+1.00	280.50-77.00
Feb.	282.00	−1.00	—
March	283.25	−0.75	—

Turnover: 3,223 (4,388) lots of 100 tonnes.

In Luxembourg the 12½ kilo bar was fixed at the equivalent of $346.50 per ounce, against $356.00.

In Zurich gold finished at $349½-350½ compared with $350-351.

LONDON FUTURES

Month	Yest'rday's close	+ or −	Business Done
	£ per troy ounce		
August	204.10-4.15	−0.425	205.50-2.00
Sept'mb'r	205.50-6.30	−0.750	206.20-4.50
October	207.40-8.25	−0.525	208.60-6.20
November	209.20-10.5	−0.550	—
December	211.00-2.70	−0.475	212.50-10.0
January	212.50-3.30	−0.550	

Turnover: 1,065 (1,201) lots of 100 ounces.

Gold Bullion (fine ounce)	July 15		July 14	
Close	$349½-350	(£203¼-203½)	$349-350	(£202¾-203¼)
Opening	$346½-347½	(£200½-201¼)	$356-357	(£206¾-207)
Morning fixing	$347¾	(£201.594)	$355¼	(£204.894)
Afternoon fixing	$350¼	(£203.634)	$352¼	(£204.516)

Gold Coins July 15					
Krugrnd	$359½-360½	(£209¼-209¾)	King Sov	$85-90	(£51-51½)
½ Krug	$185½-186½	(£108-108½)	Victoria Sov	$88-90	(£51-51½)
¼ Krug	$94-95½	(£55-55½)	French 20s	$75.5-86.0	(£44-50)
1/10 Krug	$38-39½	(£22½-23)	50 pesos Mex.	$427.7-430.2	(£248-250½)
Mapleleaf	$359½-360½	(£209-209½)	100 Cor. Aust.	$340.9-345.5	(£198½-199½)
New Sov	$85.20-85.70	(£48¼-48¾)	$20 Eagles	$390-400	(£226½-232½)

BRITISH COMMODITY MARKET

BASE METALS

BASE METAL prices were very quiet on the London Metal Exchange, with the exception of Copper. After an initial weakening in reaction to the previous day's strong performance, which brought the metal to the day's low of £852, good buying came in and copper moved ahead steadily to close the late Kerb at £861, with a further advance after hours to £869. Tin was finally £6777.5. Lead £351.5. Zinc £437.5. Aluminium £581.5 and Nickel £3003.

COPPER	a.m. Official	+ or −	p.m. Unofficial	+ or −
	£	£	£	£
HighGrade				
Cash	844.5-5.5	−16.2	843-4	−10
3 mths	866.25	−10	858-.5	−5.25
Settlem't	845.5	−16	—	
Cathodes				
Cash	819.75	−11.7	822-4	−5
3 months	840.5	−9.5	839-40	−4.5
Settlem't	820	−12	—	
U.S. Prod.	—		*67-71	

Amalgamated Metal Trading reported that in the morning higher grade three months copper traded at £858.00, 56.00, 57.00, 58.00, 59.00, 60.00, 60.50, 59.00, 60.00, 61.00, 62.00, 61.00, 60.50, 60.00. Cathodes Cash £820.00, Three months £845.00, 40.00. Kerb: higher grade Three months £857.00, 56.00, 57.00, 56.00, 55.50, 56.00. Afternoon: Higher grade Three months £855.00, 56.00, 57.00, 58.50, 56.00, 58.00, 57.00, 58.00, 59.00, 59.50, 60.00, 59.00, 58.50. Cathodes Three months £839.00, 39.00. Kerb: higher grade Three months £860.00, 61.00, 62.00, 60.00, 59.50, 61.00, 62.00, 61.00. Turnover 44,300 tonnes.

TIN	a.m. Official	+ or −	p.m. Unofficial	+ or −
High Grade	£	£	£	£
Cash	6640-5	−5	6635-40	−5
3 months	6800-10	−17.5	6785-95	
Settlem't	6640.5	−5	—	
Standard				
Cash	6640-5	−5	6635-40	−5
3 months	6785-90		6780-95	
Settlem't	6645.5		—	
Straits E.	$29.15		—	
NewYork	—			

Tin—Morning: Standard Cash £6640, 45. Three months £6780, 85, 90. Kerb: Standard Three months £6790. Afternoon: Standard Three months £6785. Kerb: Standard Three months £6785, 90, 80, 70. Turnover [illegible] tonnes.

LEAD	a.m. Official	+ or −	p.m. Unofficial	+ or −
	£	£	£	£
Cash	332.5-3	−4	[illegible]	[illegible]
3 months	345.5-6	−5	348-9	[illegible]
Settlem't	333	−4		
U.S. Spot	—		*26-9	

Lead—Morning: Cash [illegible]. Three months £350.00, 49.00, 48.00, 47.00, 46.00, 45.50, 46.00, 47.00, 46.50, 45.50. Kerb: Three months £345.00, 46.00, 47.00, 48.00. Afternoon: Three months £345.00, 47.00, 48.00, 49.00, 50.00, 49.50, 49.00, 48.00. Kerb: Three months £350.00, 50.00, 51.00. Turnover [illegible] tonnes.

ZINC	a.m. Official	+ or −	p.m. Unofficial	+ or −
	£	£	£	£
Cash	429-30	−5.5	430-1	−5
3 months	434.25	−4.5	436-.5	−2.5
S'ment	430.5	−5.5		
Primw'ts	—		37-40.5	

Zinc—Morning: Three months £435.00, 36.00, 38.00, 35.50, 34.00, 34.50, 35.00. Kerb: Three months £435.00, 35.00. Afternoon: Three months £436.00, 36.50, 36.00. Kerb: Three months £436.00, 35.50, 37.00, 38.00, 37.00. Turnover 10,775 tonnes.

Aluminm	a.m. Official	+ or −	p.m. Unofficial	+ or −
	£	£	£	£
Spot	560-1	−4.5	[illegible]	−2.5
3 months	580-.5	−2.5	569-.5	−3

Aluminium—Morning: Three months £577.00, 80.00, 80.50, 81.00, 80.50, 80.00, 79.50. Kerb: Three months £580.00. Afternoon: Three months £580.00, 79.00, 79.50, 79.00, 78.50, 79.00, 79.50. Kerb: Three months £580.00, 81.00. Turnover 27,250 tonnes.

Nickel—Morning: Three months [illegible]. Three months [illegible].

NICKEL	a.m. Official	+ or −	p.m. Unofficial	+ or −
Spot	2985-90	−13	2980-5	−30
3 months	3000-10	−17.5	3000-5	−32.5

* Cents per pound. ‡ M$ per kilo. † On previous unofficial close.

SILVER

Silver was fixed 8.1p an ounce lower for spot delivery in the London bullion market yesterday at 375.9p. U.S. cent equivalents of the fixing levels were: spot 643.2c, down 13.8c; three-month 670.1c, down 16c; six-month 694.2c, down 13.9c; and 12-month 737.6c, down 15.2c. The metal opened at 370-373p (640-644c) and closed at 376-379p (647-651c).

SILVER per troy oz.	Bullion fixing price	+ or −	L.M.E. p.m. Unoffic'l	+ or −
Spot	375.90p	−8.10	375.5p	+1.0
3 months	386.30p	−8.10	386.1p	−0.5
6 months	397.40p	−8.00	—	
12months	417.80p	−8.50	—	

LME—Turnover 197 (166) lots of 10,000 ozs. Morning: three months 387.0, 87.5, 86.0, 85.5, 85.0. Kerb: three months 386.0, 86.5, 87.0, 86.5, 86.0, 86.3, 86.0. Afternoon: three months 387.5, 86.5, 86.2, 86.1. Kerb: three months 386.0, 86.5, 86.0, 86.0.

COCOA

Futures opened £15.00 lower but steadier on trade house support for prices to trade within a narrow range in mixed conditions. Market sentiment remained uncertain in the absence of news from the ICCO Council. Business continued to be scarce, reports Gill and Duffus.

COCOA	Yesterday's Close	+ or −	Business Done
	£ per tonne		
July	865-66	−2.5	869-65
Sept.	907-08	−8.0	913-03
Dec.	947-48	−9.0	952-40
March	977-78	−10.5	985-75
May	998-99	−11.0	1007-997
July	1017-19	−10.5	1019-18
Sept.	1035-37	−11.0	—

Sales: 3,031 (1,476) lots of 10 tonnes.

COFFEE

Trade buying during a steadier morning created recent new highs in most positions, reports Drexel Burnham Lambert. After a slight retracement gains were extended before commission house selling promoted a weaker close.

COFFEE	Yest'day's Close	+ or −	Business Done
July	1262-63	−1.0	1272-63
Sept.	1114-15	−5.5	1127-12
Nov.	1023-24	−6.0	1040-22
January	990-92	−10.0	1010-990
March	971-72	−6.0	990-72
May	945-57	−16.5	978-65
July	950-54	−5.0	965-60

Sales: 2,793 (2,440) lots of 5 tonnes. ICO Indicator prices for July 14 (U.S. cents per pound): Comp. daily 1979 115.48 (115.27); 15-day average 115.47 (115.63).

GRAINS

Wheat opened unchanged and barley was slightly lower. Some trade and commercial buying firmed both markets. The market eased in quiet trading but good shipper buying on the close firmed prices, Acli reports.

Mnth	WHEAT Yesterd'ys close	+ or −	BARLEY Yest'rd'ys close	+ or −
Sept.	110.05	−0.10	104.30	−0.05
Nov.	114.00	−0.15	109.10	—
Jan	117.75	−0.10	111.70	+0.05
Mar.	121.05	−0.10	114.95	−0.10
May	124.50	+0.05	118.25	−0.10

Business done—Wheat: Sept 110.05-[illegible], Nov [illegible], Jan [illegible], March [illegible], May [illegible]. Sales: [illegible] lots of 100 tonnes. Barley: Sept 104.45-104.25, Nov [illegible], Jan 111.35-111.70, March [illegible], May 118.25 only. Sales: [illegible] lots of 100 tonnes.

HGCA—Locational ex-farm spot prices. Feed barley: [illegible]. The UK monetary coefficient for the week [illegible] is expected to [illegible].

LONDON GRAINS—Wheat: U.S. Dark *Northern Spring* No 1 14 per cent Aug 112.50, Sept 111.25, Oct 112.00 transhipment East Coast sellers. English Feed fob Oct 115.50 East Coast, Nov 118.00 East Coast sellers. Maize: French July 136.00 transhipment South Coast seller. Barley: English Feed fob July 104.25 Gunness, Aug 104.50, Sept 107.00 East Coast seller. Rest unquoted.

RUBBER

ICCO—Daily price for July 15: 71.45 (72.24). Indicator price for July 16: 72.50 (72.61).

The London physical market opened about unchanged, attracted some covering interest and closed slightly steadier. Lewis and Peat recorded an August fob price for No 1 RSS in Kuala Lumpur of 200.75 (201.00) cents a kg and SMR 20 175.0 (same).

No. 1 R.S.S.	Yest'r'ys close	Previous close	Business Done
Aug	49.90-50.20	48.90-50.00	50.00-49.70
Sept	50.80-51.20	50.00-50.30	—
Oct-Dec	52.50-52.60	51.60-51.70	52.50-51.60
Jan-Mar	55.30-55.40	54.50-54.70	55.30-54.90
Apl-Jne	58.00-58.20	57.20-57.30	58.10-57.50
Jly-Sept	60.80-60.90	60.00-60.10	60.80-60.30
Oct-Dec	63.50-63.60	62.60-62.70	63.50-63.20
J'n-Mch	66.10-66.30	65.30-65.40	66.10-65.70
Apl-Jne	68.70-69.50	67.90-68.00	—

Sales: 140 (142) lots of 15 tonnes, 25 (nil) lots of 5 tonnes.

Physical closing prices (buyers) were: Spot 48.75p (48.25p); Aug 51.25p (51.75p); Sept 51.50p (51.00p).

SOYABEAN MEAL

The market opened 30p lower in mixed trading reports T. G. Roddick. Prices remained steady in good two-way trade.

	Yesterdys Close	+ or −	Business Done
	£ per tonne		
August	125.00-26.3	−0.95	—
October	129.00-29.5	−0.35	129.70-29.50
Dec	134.00-34.2	−0.15	135.20-33.50
Feb	137.50-38.0		—
April	136.70-33.2	−0.20	138.50-33.70

Sales: 60 (61) lots of 100 tonnes.

SOYABEAN OIL—Opening prices were lower on a stronger dollar. Better nearby cash markets steadied the market. Closing prices and business done (U.S. $ per tonne): Aug 490.00, 490.50, 491.00-489.50; Oct 486.50, 487.00, 487.00; Dec 487.00, 488.00, 488.50; Feb *494.00, 495.50, 494.50-494.00; April* 493.00, 499.50, 490.50; June 504.00, 506.00, untraded; Aug 508.00, 513.00, untraded. Sales: 55 (82) lots of 25 tonnes.

SUGAR

LONDON DAILY PRICE—Raw sugar £123.00 (£128.00) a tonne cif July-Aug shipment. White sugar daily price £154.00 (£152.00).

Keen selling from one quarter initially caused prices to fall but the losses were soon recovered. Following Lichts estimate of record world stocks prices *again eased, reports C. Czarnikow.*

No. 4 Con-tract	Yesterday close	Previous close	Business done
	£ per tonne		
Aug	129.30-29.55	132.75-33.00	132.75-30.50
Oct	130.35-30.45	133.75-33.85	140.00-33.00
Jan	135.75-35.90	144.10-45.00	125.00
March	141.30-41.40	150.00-51.00	151.25-40.50
May	143.50-44.20	153.00-54.00	145.75
Aug	147.00-47.45	157.00-58.00	147.40-47.25
Oct	150.25-50.75	159.60-60.75	152.50

Sales: 6,515 (5,823) lots of 50 tonnes.

Tate and Lyle delivery price for granulated basis white sugar was £405.90 (same) a tonne for home trade and £230.00 (£275.00) for export.

International Sugar Agreement (U.S. cents per pound fob and stowed Caribbean ports). Prices for July 14: Daily price 5.90 (5.95); 15-day average 7.67 (7.34).

WOOL FUTURES

LONDON NEW ZEALAND CROSSBREDS—Close (in order: buyer, seller, business). New Zealand cents per kg. Aug 372, 373, nil; Oct 380, 383, 386-384; Dec 402, 404, 407-405; Jan 402, 405, [illegible]; March 415, 419, 421-[illegible]; May [illegible], 421-420; Aug 432 [illegible]

PRICE CHANGES

In tonnes unless otherwise stated.

	July 15 1982	+ or −	Month ago
Metals			
Aluminium	£810/815		£810/815
Free Mkt.	$980/1010	−10	$805/835
Copper			
Cash h grade	£843.5	−10	£715
3 mths	£858.25	−5.25	£737.25
Cash Cathode	£823	−5	£705
3 mths	£839.5	−4.5	£727.25
Gold troy oz	$350	+0.5	$308.5
Lead Cash	£336	+1.25	£283.5
3 mths	£348.5	+1.25	£293.5
Nickel	£4080		£3922
Free mkt	255/265c		240/270c
Platin'mtr oz'y	£260		£260
Freemkt	£173.05	−1.1	£145.35
Quicksilver†	$360/370		$370/380
Silver troy oz.	375.90p	−8.1	304.25p
3 mths	386.30p	−8.1	313.15p
Tin Cash	£6637.5	−8	£5460
3 mths	£6787.5		£5577.5
Tungsten22.0lb	$109.48		$110.92
Wolfrm22.4lbs	$113/116		$111/114
Zinc Cash	£430.5	−5	£360.5
3 mths	£436.25	−2.5	£380.5
Producers	$800		$800
Oils			
Coconut (Phil)	$485v		$500
Groundnut	$565v		$590
Linseed Crude	£353		£365
Palm Malayan	$425y		$485
Seeds			
Copra Philip	$330v		$340
Soyabean (U.S.)	$257	−2	$259.75
Grains			
BarleyFut. Nov	£108.10		£104.55
Maize	£136.00		£135.75
Wheat Fut.Nov	£114.00	+0.15	£108.30
No.2HardWint	‡		‡
Other commodities			
Cocoa ship't*	£943	−8	£899
Future Sept	£907.5	−8	£868.5
Coffee Ft' Sept	£1114.5	+5.5	£1115.5
Cotton A.Index	79.00c		75.60c
Gas Oil Aug	$274.5	+2.75	$279
Rubber (kilo)	48.75p	+0.5	47.75p
Sugar (Raw)	£123v	−5	£95
Woolt'ps 64s kl.	386p kilo	−3	397p kilo

‡ Unquoted. x Aug-Sept. v July-Aug. w Aug. † Per 76-lb flask. * Ghana cocoa. n Nominal.

INDICES

FINANCIAL TIMES

July 14	July 15	M'th ago	Y'ar ago
236.04	235.63	224.95	260.40

(Base: July 1 1952 = 100)

REUTERS

July 15	July 14	M'th ago	Y'ar ago
1572.1	1576.9	1495.4	1702.9

(Base: September 18 1931 = 100)

MOODY'S

July 14	July 15	M'th ago	Y'ar ago
996.0	1004.4	975.1	1075.1

(December 31 1931 = 100)

DOW JONES

Dow Jones	July 14	July 15	Month ago	Year ago
Spot	135.69	125.14	120.93	—
Futr's	126.98	126.95	118.34	—

(Base: December 31 1974 = 100)

442, nil. Oct 440, 445, nil; Dec 441, 448, nil. Jan 442, 450, nil. Sales: 46.

COTTON

LIVERPOOL—Spot and shipment sales amounted to 100 tonnes. Further demand strengthened, but the offtake was again irregular. Interest was shown in specialist Middle Eastern growths, with minor support in African qualities.

HIDES—Manchester, the market was little changed. Second clears Ox: 31-35.5 kg, 56.7p a kg (56.7p); 26-30.5 kg, 57.8p a kg (57.5p); 22-25.5 kg, 62.7p a kg (62.6p). Light cows 25.5 kg, 63.1p a kg (62.6p).

POTATOES

LONDON POTATO FUTURES—There were further falls in all positions, with the market closing at the lows after quiet trade, *reports Coley and* Harper. Closing prices: Nov 55.00, −1.80 (high 56.50, low 55.00); Feb 62.00, −1.40 (high 63.00, low 62.00); April 70.30, −1.20 (high 71.00, low 70.20); May 79.00, −1.10 (high 79.60, low 78.60); Nov 64.10, +0.60 (64.10 only). Turnover: 333 (211) lots of 40 tonnes.

MEAT/FISH

MEAT COMMISSION—Average Fatstock prices at representative markets. GB—Cattle 101.27p per kg lw (−1.03). GB—Sheep *126.38p per kg est dcw* (−15.31). GB—Pigs 70.22p per kg lw (−5.61).

SMITHFIELD—Pence per pound. Beef: Scotch killed sides 77.4 to 83.5; Ulster hindquarters 85.0 to 87.0. Veal: Dutch hinds and ends 119.5 to 125.5. Lamb: English small 60.0 to 66.7, medium 58.0 to 62.0, heavy 54.0 to 56.0; Scotch heavy 52.0 to 54.0. Imported: New Zealand PL 62.0 to 64.0, PX 60.0 to 61.0. Pork: English, under 100 lb 34.5-54.0, 100-120 lb 43.0 to 52.5, 120-160 lb 38.5 to 50.0.

GRIMSBY FISH—Supply good, demand good. Prices at ship's side (unprocessed) per stone. Shelf cod £4.00-£5.00, codlings £3.00-£4.50; large haddock £3.20-£4.50, medium £2.00-£4.00, small £1.20-£2.40; large plaice £3.80-£5.40, medium £2.60-£5.60, best small £3.40-£4.40; large skinned dogfish £7.00-£7.50, medium £5.00-£6.00; large lemon soles £6.00; rockfish £1.60; saithe £1.10-£2.00.

COVENT GARDEN—Prices for the bulk of produce, in sterling per package except where otherwise stated. Imported Produce: Oranges—Outspan: Navels 40 5.50, 48 5.70, 56 6.65, 72 5.55, 88 5.85, 112 5.45, 138 5.15, 150 4.55. Brazilian: 88/100 6.50; Jaffa: 88/105/123 7.60. Lemons—Spania: Trays 5 kg 40/50 1.60-2.00. Outspan: 15½ kg 80/180 5.00-7.00. *Grapefruit*—Jaffa: 20 kg 27 4.25, 32 4.45, 36 4.65, 40 4.90, 48 5.40, 56 5.35, 64 5.15, 75 4.95, 88 4.00. South African: 27 4.75, 32 5.40, 36 5.40, 40 5.40, 48 5.35, 56 5.50, 64 4.80, 72 4.50—Ruby same as White.

AMERICAN MARKETS

NEW YORK, July 15.

Heating oil was moderately higher on the Iraq-Iran conflict. Precious metals were sharply lower on profit-*taking* and on failure to react to lower interest rates. Copper came under pressure from arbitrage selling and technical selling. Heavy trade selling pushed cotton lower. A more favourable *weather* forecast for Brazil attracted commission house selling in Coffee. Sugar rallied moderately on short-covering despite a bearish private production estimate, reported Heinold.

Copper—July 63.85 (64.70), Aug 64.40 (65.25), Sept 65.05-65.15, Dec 67.50-67.60, Jan 68.30, March 69.90-69.95, May 71.35, July 72.80, Sept 74.30, Dec 76.50, Jan 77.25, March 78.70, May 80.15.

*Gold—July 344.1 (347.4), Aug 345.3-346.0 (349.2), Sept 349.7, Oct 353.0-354.0, Dec 360.5-362.0, Feb 370.5-371.0, *April 377.6,* June 385.7, Aug 394.0, Oct 402.5, Dec 411.0, Feb 419.6, April 428.2.

*Platinum—July 285.2 (290.1), Oct 294.1-295.0 (298.6), Jan 302.4, April 311.1, July 319.0. Sales: 2,029.

Potatoes (round whites)—Nov 71.5 (69.0), Feb 72.0 (72.2), *March* 82.4, April 93.4-93.5.

¶Silver—July 633.0 (646.0), Aug 635.0 (649.0), Sept 643.0-646.0, Dec 666.0-670.0, Jan 676.0, March 696.0, May 708.0, July 724.0, Sept 740.0, Dec 764.0, Jan 772.0, March 788.0, May 804.0. Handy and Herman bullion *spot: 649.00 (647.00).*

Sugar—No. 11: Sept 9.11-9.13 (9.01), Oct 9.33-9.35 (9.19), Jan 9.60-9.80, March 10.25-10.30, May 10.50, July 10.65-10.68, Sept 10.85-10.95, Oct 10.95-11.05. Sales: 10,020.

Tin—533.00-539.00 (537.00-540.00).

CHICAGO, July 15.

Lard—Chicago loose 22.00 (21.75).

Live Cattle—Aug 64.80-64.75 (64.82), Oct 62.95-62.85 (62.50), Dec 62.90-62.80, Feb 62.15, April 61.82, June 62.70, Aug 61.50.

Live Hogs—July 60.95-61.00 (60.50), Aug 59.50-59.40 (58.92), Oct 57.15-57.20, Dec 56.75-56.85, *Feb 53.90-54.02,* April 50.45, June 51.05, July 51.00, Aug 49.95.

‡‡Maize—July 270¼-270½ (267¼), Sept 284½ (284¼), Dec 284½-284¼, March 278¾-278¾, May 287¼, July 292¼.

Pork Bellies—July 78.30-78.55 (78.82), Aug 75.45-75.25 (74.95), Feb 73.90-*74.00, March* 73.00-73.35, May 69.90, July 70.65-70.70.

†Soyabeans—July 627-627½ (625¾), Aug 625-624 (624¼), Sept 620½-621½, Nov 623-622½, Jan 638½-637½, March 655, May 668, July 679.

‖Soyabean Meal—July 183.5-183.0 (182.5), Aug 181.8-181.5 (181.6), Sept 180.7-181.0, Oct 180.8-181.0, Dec 184.7, Jan 186.5, March 190.5, May 195.0-196.0, July 200.0-201.0.

Soyabean Oil—July 18.72-18.71 (18.75), Aug 18.74-18.73 (18.79), Sept 18.84, Oct 19.00, Dec 19.35-19.34, Jan 19.60-19.55, March 19.90-19.85, May 20.05-20.10, July 20.30-20.35.

†Wheat—July 338¼ (337), Sept 351-350½ (349½), Dec 374½-373½, March 390½, May 397½-397¾, July 397.

WINNIPEG, July 15

§Barley—July 122.5 (123.4), Oct 115.1 (115.8), *Dec 117.4, March 122.4, May* 124.3.

§Wheat—SCWRS 13.5 per cent protein content cif St. Lawrence 230.99 (229.39).

All cents per pound ex-warehouse unless otherwise stated. * $ per troy ounce. ¶ Cents per troy ounce. ‡‡ Cents per 56-lb bushel. † Cents per 60-lb bushel. ‖ $ per short ton (2,000 lb). § $Can. per metric ton. §§ $ per 1,000 sq ft. ‡ Cents per dozen. †† $ per metric ton.

Wednesday's closing prices

NEW YORK, July 14.

††Cocoa—July 1401 (1438), Sept 1441 (1478), Dec 1506, March 1573, May 1615, July 1657, Sept 1694. Sales: 1,945.

Coffee—"C" Contract: July 138.40 (135.20), Sept 125.20-125.70 (122.77), Dec 118.70-118.75, March 114.50, May 110.50-110.75, July 108.25-109.00, Sept *107.00-107.55, Dec 104.50-104.75.* Sales: 1,910.

Copper—July 64.70 (63.75), Aug 65.25

Cotton—No. 2: Oct 71.85-72.00 (72.00), Dec 74.10-74.15 (74.27), March 76.10, May 77.50, July 78.10, Oct 76.00-78.50, Dec 76.10-76.50. Sales: 6,200.

Heating Oil—(cents per U.S. gallon): Aug 88.50-88.70 (88.31), Sept 88.30-88.35 (88.23), Oct 88.35-88.60, Nov 89.05, Dec 89.65-90.10, Jan 90.10, Feb 91.50, March 91.00, April 90.50, May 89.50.

Orange Juice—*July* 125.40-125.55 (125.65), Sept 127.25-127.50 (128.45), Nov 127.00, Jan 127.50-127.85, March 128.75-129.00, May 129.85-130.00, July 130.95-131.15, Sept 132.05-132.25, Nov 133.15-133.35. Sales: 750.

*Platinum—July 289.1 (306.2), Oct 299.0-300.0 (314.7), Jan 303.0, April 314.6, July 323.3. Sales: 3,345.

CHICAGO, July 14.

Chicago Imm Gold—Sept 352.6-353.0 (361.5), Dec 364.0-364.2 (373.8), March 376.6, June 389.1, Sept 401.6.

EUROPEAN MARKETS

ROTTERDAM, July 15.

Wheat—(U.S.$ per tonne): U.S. No 2 Red Winter July 143. U.S. No Three Amber Durum July 170, Aug 171, Sept 174, Oct 177, Nov 180, Dec 184. U.S. No Two Northern Spring 14 per cent July 178, Aug 174, Sept 175, Oct 177, Nov 179.50, Dec 183. Canadian Western Red Spring Aug 199.

Maize—(U.S.$ per tonne): U.S. No Three Yellow spot 128, afloat 125, July 124, Aug 122.50, Sept 122.50, Oct/Dec 121.50, Jan/March 129 sellers.

Soyabeans—(U.S.$ per tonne): U.S. Two Yellow Gulfports July 251, Aug 252, Sept 252, Oct 245.50, Nov 245.50, Dec 250.75, *Jan* 256.75, Feb 260.50, March 264 sellers.

Soyameal—(U.S.$ per tonne): 44 per cent afloat 207, July 211.50 traded; afloat 208.50, July 212.50, Aug 216, Sept 218, Oct 219, Nov 221, Nov/March 225 sellers. Pellets Brazil afloat 215, July 217, Aug 219, Sept 223, Oct 229, Nov/March 244 sellers.

Sugar—(FFr per tonne): Aug 1750/1920, Oct 1702/1708, Nov 1695/1705, Dec 1655/1665, Mar 1752/1760, May 1793/1810, July 1810/1840, Aug 1835/1855. Sales at call: 56.

PARIS, July 15

Cocoa—(FFr per 100 kilos): July 1050 asked, Sept 1090/1099, Dec 1131/1140, Mar 1177/1195, May 1205/1225, July 1260/1270, Sept 1295/1305. Sales at call: nil.

PLATIGNUM

The cost of ignoring product design

By Christopher Cameron-Jones

FOR ABOUT the price of a Bic ball-point pen it is possible to buy a share in Platignum. Last week they were trading at 9½p per 5p share—valuing the troubled group at £4.2m.

Platignum—whose pens have been used by generations of UK schoolchildren—has seen its sales and profits fall sharply in recent years. But under a new managing director and an injection of £1m of additional capital it is trying to reverse the trend.

Platignum, the former Mentmore Manufacturing Company, which pioneered low-cost steel-nibbed fountain pens in Britain in the 1920s, is still the major supplier of pens to schools in this country. But its "get 'em young" policy has been proving less and less effective in a UK market worth around £100m a year.

Ten years ago the company held 20 per cent of the retail pen market by value. But by the start of this decade its share had fallen to 10 per cent.

Competition from products at the cheap end

The market leader now is Parker Pen, with 20 per cent, while Papermate, owned by Gillette, holds around 18 per cent. Bic, of France, holds 10 per cent, Pental of Japan 8 per cent and Sheaffer, of the U.S., about 5 per cent.

Why the decline in Platignum's share? To some extent it may be due to competition from products at the cheap end of the market — disposable ball points such as the Bic. For while Platignum has diversified away from its traditional fountain pens — which now account for only 25 per cent of its sales — into refillable ballpoints and felt-tipped pens, it has not penetrated the disposable market.

But Platignum admits that a major factor in the decline has been its inattention to new designs and new products. Like the schoolchildren who use them, its products have aged.

Amid the recession, the writing instruments market has been relatively resilient. Overall UK market volume has changed little in the last few years. But Platignum's profits have plummeted. In all but one year of the 1970s its profits topped £500,000 pre-tax, with a peak of £655,000 in 1978/79. But in the 12 months to the end of January 1981 the group was showing a loss of over £444,000 and was cutting the workforce.

Last year sales plummeted 24 per cent and total group turnover slid from £10.5m to £7.7m. The loss climbed to over £600,000 and for the second year running shareholders had to forgo any real dividend.

But, earlier this month shareholders were being told by David Leeming, the company's new managing director, that plans aimed at revitalising the group were under way.

Mr Leeming, 34, a former senior marketing executive with Parker Pen in Europe, joined the board three months ago along with a friend, Mr Rodney Collier, 38, who is injecting his point-of-sale material designing and manufacturing company into Platignum.

Platignum's takeover of R. P. Collier, involving a £200,000 share deal, was part of a £1m cash injection arranged in March this year by way of a rights issue and a placing mainly with City institutions.

Along with two new non-executive directors, Mr Leeming and Mr Collier bring the average age of the Platignum board down to 41.

The new capital will be used mainly for the introduction of fresh products in an attempt to catch up with foreign competitors whose new designs flooded the UK market in the late 1970s while Platignum was resting on its laurels.

MR DAVID LEEMING
½ per cent of world market

By the time Platignum's management realised it was not devoting enough attention to the problem profits were contracting so fast that it was wary of venturing into pastures new. As the losses mounted cash was needed to maintain the existing business.

When Mr Leeming arrived he discovered that the company's designers had drawers full of projects which had been abandoned because of lack of funds—and a good many of them offered exciting possibilities.

The company now plans to launch two or three new products a year.

Platignum has also been re-examining the structure of demand. Some 30 per cent of the UK market in value terms is represented by gifts, ranging from packs of felt tips for children's birthday presents to £1,000 gold fountain pens. But at Platignum, aside from those pens bought retail for children to use in school, gifts represent only a tenth of sales.

While the fountain pen retains its image as the instrument to use to write with style, in unit sales terms—some 6m are sold a year—it has been pushed far into the shadows by 200m ball points, and 200m felt and fibre tipped pens. Recently introduced roller ball wet inkers have meant further competition.

The company believes there is no logic in attempting a major assault on the disposable ball point market. As for felt tips and fibre tips, sales are hampered by foreign competition, chiefly from Italy where, subsidies mean producers can make plastic components cheaper than Platignum can buy the raw materials. So the company's main drive will be on middle priced ball-points and fountain pens.

Mr Leeming is aiming for a 70 per cent volume increase over the next three years: "This is not asking for much in the context of a worldwide market of over £1bn. We are going for ½ per cent of this in areas that we are good at," he says.

Most of the growth is seen coming from exports. The group had already good distributor links with the old Commonwealth countries and the U.S. and is currently improving its links with the Middle East and hopes to create a good network in Europe, where it has performed very poorly in the past.

In its last financial year exports fell from £1.6m to just over £1m, about 13 per cent of total turnover, with North America becoming the largest customer at £0.3m, while the Middle East business collapsed, mainly as a result of the war between Iran and Iraq, from £0.7m to £0.12m and trade with other EEC countries was down from £0.14m to £0.1m.

Future success will also depend on Platignum containing costs. Over the past two years the workforce has been more than halved from 1,000 to 450 and automation has been introduced at its 160,000 sq ft factory and offices block at Stevenage.

Half the factory space is occupied by plastics moulding, which, as well as providing pen components, handles sub-contract work for such companies as Black and Decker and Electrolux. But the plastics moulding industry generally was running at 42 per cent below capacity last year and Platignum's turnover here fell 35 per cent. No real growth can be expected in moulding in the medium term.

No real growth in plastics moulding

But Mr Leeming believes that measures taken have put the group back on course for recovery. The point-of-sale business Collier, where pre-tax profits jumped from £27,000 to £100,000 last time, is seen as becoming a major contributor.

The company is hoping to approach breakeven in the year to the end of January 1983 with an upturn to profits of the order of £700,000 for the following 12 months. Mr Leeming has underwritten his optimism by raising around £35,000 secured against his home to buy a 1.2 per cent stake.

In 12 months' time he should know if he would have been better to have spent his money elsewhere, if not on Bic pens.

APPOINTMENTS

Ulster Bank chairman joins NatWest board

Mr Frank O'Reilly, chairman of Ulster Bank, has been appointed a director of NATIONAL WESTMINSTER BANK, its parent Bank. Mr O'Reilly served on Ulster Bank's advisory committee from 1959 before becoming a director in 1961 and deputy chairman in 1974. He became chairman earlier this year. Since 1955 he has been chairman of Irish Distillers, although he will be retiring at next February's annual meeting. He is also chairman of the Royal Dublin Society.

*

Mr Michael Finn, Dr Jim Pearson, Mr John Bradbury, Mr Reg Dabbs and Mr Jim Kellie have been appointed to the board of LONDON AND SCANDINAVIAN METALLURGICAL COMPANY.

*

MORISON STONEHAM INVESTMENT MANAGEMENT has appointed Mr Michael Boyd-Carpenter to the board. The company is the investment management business of Morison Stoneham and Co.

*

Mr Max Blackston, currently chairman of CER (the Research International agency in Italy), will be returning to the UK on August 1 to become chairman of one of the RI UK companies, MARPLAN. Mr John Fuller of Marplan will take on general responsibilities for account development. Mr David Cahn, resources director of RI's other main UK agency, RBL, will shortly be transferring to Italy to succeed Mr Blackston as chairman of CER. Mr Cahn's place on the RBL board will be taken by Mr Jon Wilkinson, currently an operations director.

*

BPCC has appointed Mr Roger Hutton as group sales director. He will continue to be sales and marketing director of Waterlow.

*

Mr Eric C. Reed, director of engineering for the THAMES WATER AUTHORITY, has decided to take early retirement from November 19.

*

The Earl of Euston, an assistant director of J. Henry Schroder Wagg and Co., has been appointed an executive director of the London-based operation which, subject to approvals in Sweden and the UK, SKANDINAVISKA ENSKILDA BANKEN is setting up to develop its role in the international capital and corporate finance markets. He will be responsible for corporate finance.

*

SEALED MOTOR CONSTRUCTION, a member of the Adwest Group, has appointed Mr John P. M. Derham financial director. He has been company secretary for the past three years.

*

THE CHARTERED INSTITUTE OF TRANSPORT has elected the following for the year commencing October 1: president-elect: Mr L. S. Payne, director, J. Sainsbury; vice-presidents: Mr R. Brook, chief executive, National Bus Company; Mr G. C. Edmunds, formerly British Transport Staff College; Mr J. F. Higgins, general manager, Coras Iompair Eireann; Mr G. Myers, member, British Railways Board; Mr J. K. Stuart, chairman, British Transport Docks Board; and Mr P. A. Thompson, chief executive, National Freight Consortium. Treasurer: Mr A. J. Tomsett, finance director, British Transport Docks Board. Librarian: Mr N. J. Payne, chairman, British Airports Authority. Secretary: Mr T. L. Beagley, past president.

*

THE INSTITUTION OF PRODUCTION ENGINEERS has elected principal officers for the year 1982-83: president: Sir Robert Telford; vice-presidents: Professor Martyn Farley and Mr Alex Houseman; chairman of council: Mr Alan MacGregor; vice-chairman: Mr Keith Williams.

CONTRACTS

£14m pipelaying order

PRESS CONSTRUCTION has secured a major share of the Thames Water Authority's periodical pipelaying and repair contracts. Under a contract valued at more than £14.5m the company's Swindon-based distribution region will lay new pipes and carry out alterations, repairs and emergency tasks on Thames Water's clean-water systems throughout three large zones in Greater London. The contract will run for three years.

*

CHARTERSET INSULATION, Grantham, has been awarded a £2.75m contract for the new Yarmouk University Campus in Jordan. The order is for the supply and installation of about 16 km of an underground heating main distribution complex using a patented pre-stressed steel cased pipe-in-pipe system complete with a computer alarm system. Main contractor is Hanbo General Construction Company of Seoul.

*

METHODIST HOMES for The Aged has placed a £1.1m contract with BOVIS for the conversion of Wesley Methodist Church, Lancaster, into five floors of sheltered housing. This will result in 36 one and two-person flats, together with warden's accommodation, and a passenger lift installed in the church tower.

*

GEC RECTIFIERS has received an order worth £2m for the supply of 26 power conditioning units for Canadian built light rail vehicles. The contract was obtained through GEC Canada of Toronto who negotiated an order from Metro Canada for a bulk purchase arrangement to supply up to a total of 200 units for use in Intermediate Capacity Transit System (ICTS) contracts handled by Metro Canada. These variable frequency, variable voltage high power transistor inverters rated at 670kVA and mounted on the underside of each railcar, provide power to the linear induction motor drives. Speed control of the vehicle is achieved by frequency variation which is governed by a computerised automatic control system.

INTERNATIONAL COMPANIES and FINANCE

Manny Hanny boosts income

By Our New York Staff

MANUFACTURERS HANOVER, the large New York bank, managed to overcome losses from last May's Drysdale affair to report a 16 per cent increase in profits for the second quarter of this year.

Net income before securites transactions was $63.8m, or $1.79 a share, compared with $55m, or $1.63 a share in the same period last year. The biggest gains came from increased net interest income and other operating income, as well as from lower applicable income taxes.

Earnings for the first half of this year were $126.3m or $3.60 a share, up 10 per cent from $115m, or $3.42 a share in the first half of 1981.

The bank's final losses from the default of Drysdale Government Securities amounted to $21.4m, or $8.8m after tax. This was partly responsible for the sharp 74 per cent increase in the bank's operating expenses during the quarter, to $385.5m.

Chase Manhattan, which suffered the largest losses from Drysdale, has not yet reported for the second quarter. Its results are expected next week.

J. P. Morgan shows 10% first-half gain

By Our New York Staff

J. P. MORGAN, parent of Morgan Guaranty Trust, the large New York bank, reported little change in earnings for the second quarter of 1982, as higher costs offset profits. Net income before securities transactions was $96.8m, compared to $96.6m in the second quarter last year, equivalent to $2.35 a share in both cases.

Morgan, which specialises in wholesale banking, said that earnings from its lending business rose to $277.1m, from $233.2m, as both the volume of lending and the net yield improved. Income from bond and foreign exchange trading was also up.

The stresses which high interest rates are placing on borrowers showed up in a sharply increased loan loss provision. Morgan allowed for $311m, up from $256m last year.

Non-performing loans increased from $87.1m to $384.3m. These are not necessarily loans which Morgan will have to write off, but it means borrowers are failing to keep up payments.

The results brought Morgan's half-year earnings to $196.3m or $4.76 a share, up 10 per cent from $177.8m or $4.33 a share.

Allis-Chalmers incurs further heavy fall

FRESH TRADING losses were suffered in the second quarter at Allis-Chalmers, the Milwaukee machinery manufacturer, and the directors warn that there will be "continued erosion of earnings in the latter half of the year."

Mr David C. Scott, chairman and chief executive, said that the half-year had seen demand for farming equipment at its lowest level for a decade, the lift-truck industry in its worst slump for new orders since 1975, and demand for capital goods generally still depressed.

The second quarter loss amounted to $18.29m, equal to $1.45 a share, compared with a profit of $4.6m or 37 cents a share last year. At the halfway stage the loss totalled $18.24m, also $1.45 a share, against a profit of $7.19m or 57 cents a share previously. Allis incurred a loss of $28.8m for the whole of 1981.

The latest figures include preferred dividend requirements of $2.5m in the second quarter and $5m in the half-year. The latest six months also includes a gain of $16.7m or $1.33 a share from the first quarter sale of shares in Siemens-Allis to Siemens AG of West Germany.

Returns for 1981 include preferred dividend requirements of $1.6m for the second quarter and $2.2m for the half-year.

Penn Square losses lead Seafirst to redeploy 400

BY DAVID LASCELLES IN NEW YORK

SEAFIRST, the Seattle bank which suffered large losses through the recent collapse of Penn Square Bank in Oklahoma, confirmed yesterday that up to 400 people, some 4-5 per cent of its staff, are to be "redeployed."

The bank will also postpone merit raise reviews and will probably eliminate all 1982 management bonuses and profit-sharing.

The bank, which employs 8,000 people, said that many of the staff affected would "find other positions within the corporation. Every effort will be made to place as many of these people as possible."

Seafirst revealed earlier this week that its losses from Penn Square could run as high as $125-165m, or $68-90m after tax. As a result, the bank will announce a loss for the first half of this year.

Mr William Jenkins, the Seafirst chairman, said the measures were being taken to achieve cost reductions in the light of poor economic conditions and higher funding costs, as well as loan losses.

Meanwhile the collapse of Penn Square has had its expected ripple effect in the energy region. Several banks in Texas have reported unusually large deposit outflows in the last few days, prompting U.S. bank regulators to issue assurances that certain banks at the centre of rumours are not about to close their doors.

The Federal Deposit Insurance Corporation has also announced that uninsured deposits at Penn Square amounted to $250m, substantially more than the $190m it had originally calculated. Most of these deposits were placed by financial institutions such as credit unions. It is unclear as yet how much they will recover. The FDIC itself guarantees only deposits of up to $100,000

Kuwait payment aids Reynolds

BY OUR NEW YORK STAFF

R. J. REYNOLDS INDUSTRIES, leader in U.S. cigarette sales and fourth in the world tobacco market, boosted second quarter earnings from $199m, or $1.82 per share, to $295m or $2.74 per share. Revenues rose from $2.97bn to $3.1bn.

The company said, however, that the quarter included a non-recurring gain of $173m, or 87 cents, from an arbitration award paid by the Government of Kuwait for nationalising its oil properties.

The half-year figures showed a gain of 24 per cent to $480m, or $4.43 a share, compared to $387m, or $3.54. Sales were 4.3 per cent up at $5.99bn, compared to $5.74bn.

Mr J. Sticht, chairman and chief executive, said record domestic cigarette sales for the first half year reflected higher prices and also strong sales trends in such favoured brand names as Camel and Vantage.

On the international side, operating earnings were down despite higher sales. Mr Sticht blamed this on the strength of the U.S. dollar against other currencies and also on a fall in U.S. exports.

Del Monte, which is Reynolds' food industry subsidiary, has seen lower sales in the U.S. Earnings have been hurt also by higher cos

Sea-Land Industries Investments, the transportation unit which includes the world's largest container operation, continue to push both sales and earnings ahead.

Mr Sticht disclosed that the compensation payments from Kuwait will be used to "increase marketing activities" in Reynolds' proven performers in the tobacco business and to bring forward new products to support Del Monte in its further penetration of consumer markets. About $17m has been so committed to date.

Searle lifts earnings and sales

BY OUR NEW YORK STAFF

G.D. SEARLE, the pharmaceuticals and optical products group, has reported second quarter net profits of $32.5m, or 64 cents a share. A year-earlier loss of $3.2m included a $35m write-off of a medical products business which was closed.

Net profits from continuing operations rose by 11 per cent while second quarter sales rose by 9.7 per cent to $257.4m from $234.7m a year earlier.

This brings Searle at the half-way stage to net profits of $60.8m, or $1.20 a share, on sales of $492.3m, compared with net profits of $18.9m, or 38 cents, on $451.7m. Last year's net includes a total of $35m of provisions associated with the discontinued medical products activities.

Sales this year have been boosted by such new products as Nutrasweet, which Searle says has already taken 10 per cent of the $200m market for sweeteners.

Wall Street analysts are forecasting full-year profits from continuing operations of $2.80 a share, compared with $2.52

Searle plans to spend about $100m on research and development of new drugs this year, an increase of about one-fifth over 1981. Although the results of this expenditure may not appear on the bottom line for four or five years, it is seen as a strong point for the shares, which are trading at an eight-year high of about $36.

By comparison with the drug side, Searle's optical division, which operates nearly 1,000 retail stores, has been hit by the recession and its effect on consumer spending. However, the board is expanding the opticals side and expects sales to recover sharply.

Downturns for Grace and Allied

BY OUR NEW YORK STAFF

W. R. GRACE and Allied Corporation, two diversified chemicals and natural resources companies, reported yesterday lower second-quarter earnings, reflecting the general downturn in their industries.

Grace's net earnings declined 23 per cent to $76.9m from a year earlier. Sales totalling $1.6bn were 4 per cent lower. Profits per share were $1.59, against $2.08.

The company's first-half net earnings were 20 per cent up at $221m, against $184m, but the latest figure included a $65m gain from the sale of its Chemed subsidiary. Six months' sales were $3.1bn, against $3.18bn.

Grace said second-quarter operating earnings of its specialty chemicals business rose 7 per cent, but the cyclical downturn in the agricultural industry caused a 29 per cent fall in operating income of Grace's farm chemicals division.

Allied reported second-quarter earnings of $82m, down from $87m a year earlier. Six months' earnings declined 15 per cent to $145m from $171m.

Sales in the second quarter were virtually flat at $1.6bn. First-half sales totalled $3.21bn compared with $3.18bn.

Signal hit by depressed market in heavy trucks

BY OUR FINANCIAL STAFF

THE depressed condition of the heavy truck market has taken its toll on the results of Signal Companies, the multi-industry company which has an 80 per cent stake in Mack Trucks.

Second quarter earnings declined from $57.3m or 79 cents a share to $37m or 51 cents a share on sales marginally ahead at $1.4bn against $1.34bn.

This left first half results 35 per cent lower at $68.2m or 94 cents a share against $105.1m or $1.45 on revenues of $2.62bn compared with $2.58bn.

Mr Forrest Shumway, chairman and chief executive, said: "It is impossible at this time to forecast confidently Signal's profitability for the remainder of the year."

However, he expected declines in income for the next two quarters which would probably exceed the size of the earnings fall of the first six months, mainly because of the depressed condition of the heavy truck market.

Last year Mack Trucks contributed 29 per cent of the value of Signal's sales. It is also involved in turbine engines, aerospace components, petroleum services and other diversified businesses.

In the first quarter of the year, the California-based group also turned in sharply lower profits of $31.2m or 43 cents a share against $47.8m or 66 cents a share on sales of $1.22bn against $1.23bn.

Net profits for 1981 were $214m or $2.95 a share

Advance at Raytheon

By Our Financial Staff

RAYTHEON, the maker of air defence missile systems and other U.S. Government electronics products, has continued its consistent record of earnings growth.

Second quarter profits rose from $83.9m or $1 a share to $85.8m or $1.02 on sales static at $1.4bn. This brought first half results of $165.16m or $1.96 a share, up from $157.17m or $1.88 on sales slightly ahead at $2.84bn against $2.73bn.

The company said Government electronics systems, energy services and educational publishing performed well, but demand was still weak for aviation products and major appliances, because of high interest rates and the lagging economy.

GTE reports second quarter rise

BY PAUL BETTS IN NEW YORK

A STEADY increase of 13 per cent in second quarter profits is reported by GTE, the large U.S. telecommunications company previously known as General Telephone and Electronics Corporation, and the group looks set for a record year.

Net earnings for the period improved from last year's corresponding $178.4m or $1.08 a share to $200.9m or $1.14 a share on revenues up from $2.67bn to $3.03bn. Half-year earnings improved 12 per cent, from $356.7m to $398.9m, or from $2.18 to $2.28 a share, on revenues increased from $5.24bn to $5.93bn.

For the whole of 1981, earnings reached a record $782m or $4.32 a share on peak revenues of $11bn.

The company said both its telephone operations and communications products businesses reported increased sales and earnings in the latest period. Telephone revenues rose 17 per cent while telephone profits increased 20 per cent over the same period last year. The company's communications products operations had a 20 per cent increase in sales and a 17 per cent rise in profits.

Alcoa suffers sharp reverse

By Terry Byland in New York

LATEST results from Aluminum Company of America (Alcoa), the world's largest producer of aluminium with 15 per cent of the global total, confirm the dire state of the industry.

Mr Krome George, chairman and chief executive, made no forecast for the immediate future but commented that Alcoa's customers report that their inventories are at the lowest level for nine years.

Alcoa has managed a profit of $15.1m for the second quarter, down from $81.5m in the comparative quarter, or from $1.09 to 19 cents at the per share level. The effects of price-cutting in the industry are reflected in lower sales of $1.24bn, against $1.30bn.

For the half-year the $39m operating profit is 79 per cent down on last year, despite help from an extraordinary gain of $19.9m. Six months sales of $2.45bn, compare with $2.60bn.

Mr George commented that the company has been hit by low selling prices and high costs, and has been forced to shut down. Alcoa has shut down about 9 per cent of its productive capacity to date, the most recent being the permanent closure of its 145,000 tonnes a year smelter in Texas.

Mr George would not speculate as to the outlook for the company or the industry, saying only that Alcoa is "concentrating on reducing expenses and positioning itself to take advantage of the upturn when it comes."

Recent months have shown some indication that U.S. inventories of aluminium are declining. Earlier this week, Mr Cornell Maier, chairman of Kaiser Aluminum said he saw some signs of a turnround in the industry.

Alcoa's shipments fell to 399,000 metric tonnes in the second quarter compared with 412,000 tonnes a year ago, and 397,000 tonnes in the first quarter of this year. This suggests that Alcoa may be curbing sales rather than sell at prices often well below official posted levels.

Apple Computer growth slows in third quarter

By Louise Kehoe in San Francisco

APPLE COMPUTER, the personal computer maker, has reported a 28 per cent rise in third quarter net profits of $15.2m, or 26 cents a share, from $11.9m, or 21 cents a year earlier. Sales rose by 57 per cent to $142.7m from $90.7m.

For the nine months ended June 25, net profit was $42.6m, or 74 cents, on sales of $407.25m, compared with $28.4m, or 51 cents, on $237.1m. These represented profit and sales growth rates of 50 per cent and 72 per cent respectively.

Apple's performance pleased analysts who had anticipated that sales would be hit hard by increasing competition in the personal computer market. Apple's strength in distribution and the wide variety of software programmes for its machines helped to keep sales up, suggested Mr Gregory L. Kelsey of Hambrecht and Quist, a San Francisco stockbroker.

Apple's research and development spending has almost doubled over last year to total $11.4m in the quarter and $28.3m in the nine months.

The company is expected to introduce a new version of its Apple II personal computer later this year and a business oriented computer early next year.

CSFB director resigns

By Our Euromarkets Staff

MR DAVID McCUTCHEON, an executive director of Credit Suisse First Boston, has resigned to join Salomon Brothers in London. Mr McCutcheon had been in charge of CSFB's Canadian business and had been with the Credit Suisse White Weld group before CSFB was formed in 1978; he joined White Weld 13 years ago.

Mr Ian Molson, a CSFB manager, will take charge of Mr McCutcheon's responsibilities on a temporary basis.

Dollar bonds up slightly as markets' optimism wanes

BY ALAN FRIEDMAN

EUROPE'S INTERNATIONAL bond markets slowed almost to a halt yesterday as dealers reported extremely limited buying or selling activity. Prices of fixed-interest bonds in the Eurodollar market closed slightly higher, while prices in the Euro D-Mark and Swiss franc bond sectors were unchanged on the day.

The lack of activity was attributed to the market's uncertainty over the path of interest rates, and its guessing game over the exact size of the forecast jump in the U.S. M-1 money supply due to be announced today; estimates of the increase range from $4bn to $12bn.

Sumitomo Bank launched its $50m 15¼ per cent issue as expected yesterday, and Mexico's $100m bond was increased to $150m last night through lead-manager Merrill Lynch. There is an option to increase the amount further to $175m through Merrill Lynch before the end of the month. The coupon was fixed at 18¼ per cent and a price of par was set.

All eyes in West Germany this morning will be on the new foreign bond calendar, which was set last night. The D-mark bond market held back from trading in the afternoon, waiting for the results of the meeting of the Capital Markets Subcommittee.

Throughout Europe, the undertone of bond markets has turned from cautious optimism earlier this week to nervousness.

The new American Medical zero coupon bonds appeared to be attracting buyers yesterday, with the 20-year issue priced at 8.25 per cent selling better than the 15-year priced at 14 per cent.

Daiwa Securities said it had placed its allotment in Europe, and not in Japan as had been suggested by the lead-manager, Dean Witter. Mr Gary Klesch, president of Dean Witter Reynolds Overseas, said: "We did learn that Daiwa had placed its bonds in Europe and not in Japan as we earlier indicated."

Dominion Textile expects deficit

BY ROBERT GIBBENS IN MONTREAL

DOMINION TEXTILE, Canada's largest textile group, expects to show a loss for the year ended June 30. Sales will be down by about 15 per cent.

The group, which also has plants in the U.S., Europe, Latin America and Hong Kong, blames the world recession and severe labour troubles in Canadian plants in the fourth quarter.

Domtex has recently settled its union contracts covering nearly 10,000 workers in Canada. As a result, its labour costs will rise by nearly 40 per cent over the next three years. However, the company has won the principle of seven-day working in its Quebec plants, and this will help to offset wage increases.

Mr Thomas Bell, president, said Domtex's primary and secondary markets should stabilise in the first half of the current year ending June 30 1983.

The company was cutting overheads further and had reduced capital spending by 50 per cent this year. All operations were being closely scrutinised, particularly those making products for the apparel industries. "We could emerge from this very difficult period looking somewhat different.

In fiscal 1981, Domtex earned C$42.9m (US$ 33.8m), or C$3.93 a share on sales of C$864m. Including sales of U.S. and other foreign affiliates, sales reached about C$1bn. In the first nine months of fiscal 1982, the company earned C$5.6m, or 43 cents a share.

Steep recovery in profits at Safeway

BY OUR FINANCIAL STAFF

SAFEWAY STORES, the biggest supermarket chain in the U.S., has announced an increase of more than 60 per cent in second quarter earnings after a disappointing first quarter.

Profits rose from $26.2m or $1 a share to $42.1m or $1.61, but sales were adversely affected by currency factors and rose only marginally from $3.78bn to $4.04bn.

This left first half earnings ahead at $58.1m or $2.22 against $45.47m or $1.74 on sales of $8.03bn compared with $7.37bn.

The second quarter increase reflects a particularly weak second quarter last year. It also includes extraordinary gain of $6.2m or 24 cents a share from the closure of its Omaha, Nebraska, division. Last year's interim results were restated for FASB 52 accounting regulations, which reduced them by $631,000 or three cents.

FT INTERNATIONAL BOND SERVICE

The list shows the 200 latest international bond issues for which an adequate secondary market exists. For further details of these or other bonds see the complete list of Eurobond prices which will be published next on Wednesday August 18.

Closing prices on July 15

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Aetna Life 15 86/97 ...	150	102⅞	103⅜	0	+1⅛	13.81
Amex Int. Fin. 16⅛ 92	75	97	97½	−0¼	+0⅜	16.79
Amex O/S Fin. 14⅜ 89	75	94⅝	95⅛	+0¼	+0⅜	15.48
ATT 14⅛ 89	400	103⅜	103⅞	+0¼	+1½	13.35
Baker Int. Fin. 0.0 92	225	25⅞	26⅜	+0⅛	+0⅛	14.99
BHP Finance 14⅛ 89 ...	150	95⅛	95⅝	+0⅛	+0⅛	15.84
Bk. Amer. NT SA 12 87	200	90⅜	90⅞	−0⅛	+0⅜	14.84
Bk. Montreal 14½ 87 ...	100	93⅞	94⅜	0	−0⅞	16.30
Bque. Indo Suez 15 89	100	96	96½	+0⅛	+0⅞	15.90
British Col. Hyd. 14⅜ 89	200	97⅜	97⅞	0	+1⅛	15.30
Burroughs Int. 15¾ 88	50	100⅛	100⅝	+0⅛	+1	15.54
Canada 14½ 87	750	97⅞	98⅜	+0⅛	+1	14.99
Canadair 15½ 87	150	99⅞	100⅜	0	+0⅞	15.38
Canadian Pac. 14⅜ 92	75	94⅛	94⅝	−0¼	+0⅜	15.76
Carolina Power 16½ 89	60	101⅜	101⅞	+0⅛	+0⅞	16.01
CIBC 16 87	100	97½	98⅛	+0⅛	−1⅞	16.60
Citicorp O/S 15 84/92	100	99⅝	100⅛	0	−0⅛	14.96
Citicorp O/S 15½ 85/97	125	100	100½	0	+0⅛	15.25
CNA 15⅞ 97	75	96⅞	97⅜	+0⅛	+1⅛	16.40
Con. Illinois 15⅜ 89 ...	100	97⅝	98⅛	0	−1	16.23
Duke Pwr. O/S 15½ 89	60	95⅞	96⅜	+0⅛	+1⅛	16.44
Dupont O/S Cap. 0.0 90	300	34⅞	35⅜	+0⅛	+0⅜	14.87
ECSC 14⅜ 87 (April) ...	80	97⅛	97⅝	+0⅛	+1	15.51
EIB 15½ 89	150	98⅝	99⅛	−0⅛	+0⅛	15.69
Eksportfinans 14½ 89 ...	50	96⅞	97⅜	+0⅛	+1⅛	15.23
Gen. Elec. Credit 0.0 92	400	27⅞	28⅜	+0⅛	+0⅜	14.20
Gen. Elec. Credit 0.0 93	400	23⅞	24⅛	0	+0⅛	14.43
Getty Oil Int. 14 89 ...	125	97⅜	98⅛	0	+1⅛	14.41
GMAC O/S Fin. 16 88	150	101⅛	101⅝	+0⅛	+0⅞	15.50
GMAC O/S 15⅜ 85/97	100	98⅝	99⅛	−0⅛	+0⅜	15.68
GMAC O/S Fin. 15 89	125	97⅜	97⅞	0	+1⅛	15.55
GMAC O/S Fin. 15 87	100	99⅜	99⅞	0	+1⅛	15.07
Gulf Canada Ltd 14⅜ 92	100	95⅞	96⅜	0	+1⅛	15.50
Gulf Oil 14⅛ 94	175	97⅜	98⅛	+0⅛	+0⅞	14.58
Gulf Oil Fin. 0.0 92 ...	300	27	27½	0	+0½	14.45
Gulf States O/S 16 90	60	†94⅝	95⅛	0	0	17.16
Int-Am. Dv. Bk. 15⅞ 87	55	97⅝	98⅛	+0⅛	+1½	15.66
Japan Dev. Bk. 15½ 87	50	101⅜	102⅛	0	+0⅛	14.79
New Brunswick 16⅛ 89	75	101½	102	0	+1⅞	15.74
Ontario Hydro 14⅛ 89...	150	97⅞	98⅜	0	+1⅛	15.17
Pac. Gas & El. 15½ 89	45	100⅝	101⅛	+0½	+1	15.20
Phillips Petrol 14 89 ...	200	96⅛	96⅝	+0⅛	+1⅛	14.84
R. J. Rynlds. O/S 0.0 92	400	26⅞	27⅜	+0⅛	+0⅛	14.57
Saskatchewan 16 89 ...	125	101½	102	0	+1	15.50
Shell Canada 14⅛ 92 ...	125	95½	96	0	+0⅞	15.21
Spain 15⅛ 87	100	98½	99	+0⅛	−0⅛	16.07
Superior O/S Fin. 14 89	125	94⅞	95⅛	+0⅛	+1½	15.16
Swed. Exp. Cr. 15⅜ 89	100	97⅞	98⅜	+0⅛	+0½	15.66
Swed. Exp. Cr. 14⅜ 90	100	93⅞	94⅜	+0⅛	+0½	16.09
Swed. Exp. Cr. 0.0 94	200	19⅛	19⅝	0	−0⅛	15.12
Texas Eastern 15⅜ 89...	60	100⅛	100⅝	0	−0⅛	15.60
Union Carbide 14⅜ 89	150	97⅞	98⅜	+0⅛	+1⅞	14.92
Wells Fargo I. F. 15 87	75	99⅜	99⅞	+0⅛	+1	15.36
World Bank 14⅜ 87 ...	500	96⅛	96⅝	0	+1	15.28
World Bank 15⅜ 88 ...	250	99⅜	99⅞	+0½	+1⅛	15.28

Average price changes... On day +0⅛ on week +0⅜

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Asian Dev. Bank 9¾ 92	150	98	98½	−0⅛	−0⅛	9.60
Australia 9½ 91	200	103⅜	103⅞	+0⅛	+0½	8.76
Austria 8⅛ 92	100	94⅞	95⅜	0	+0⅛	9.14
Barclays O/S In. 8⅞ 94	100	95⅛	95⅝	0	0	9.00
Bowater Int. Fin. 8½ 89	50	95⅜	96⅛	+0½	+0⅛	9.31
Canada 8½ 89	200	101⅞	102⅜	0	+0⅛	8.05
Comp. Tel. Esp. 10½ 92	100	100½	101	0	0	10.35
Cred. Foncier 8⅜ 92 ...	100	95⅞	96⅜	+0⅛	+0⅛	9.38
Denmark 10⅛ 92	100	102	102½	−0⅛	−0⅛	9.72
EDF 9⅞ 92	100	100⅜	100⅞	−0⅛	+0⅛	9.78
EIB 8⅜ 92	100	94⅞	95½	0	+0⅛	9.14
Int.-Am. Dev. Bk. 9 92	150	97⅛	97⅝	+0⅛	+0⅛	9.41
Nacnl. Financiera 11 90	150	96⅞	97⅜	+0⅛	+0⅛	11.56
Norsk Hydro 8½ 92	100	98	98½	+0⅛	+0⅛	8.77
Philips Lamps 8½ 92 ...	100	98⅛	98⅝	+0⅛	+0⅛	8.75
Philip Morris 8⅛ 90 ...	100	99⅝	100⅛	+0⅛	+0⅛	8.26
Quebec 10⅛ 92	150	102⅜	102⅞	−0⅛	0	9.67
Renfe 10 92	100	99⅞	100⅜	0	+0⅛	9.97
SNCF 8⅝ 92	100	95⅜	96½	+0⅛	+0⅛	9.23
Tauernautobahn 9⅞ 94	50	102	102½	+0⅛	+0⅛	9.53
Tenneco Int. 9 92	100	97⅞	98⅜	+0½	+0⅛	9.29
World Bank 9½ 89	100	100⅝	101	+0½	+0⅛	9.35
World Bank 8½ 92	200	95	95½	+0⅛	+0⅛	9.23

Average price changes . On day +0⅛ on week +0⅛

SWISS FRANC STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Air Canada 6⅞ 92	100	100⅞	101⅜	0	+0⅛	6.11
Asian Dev. Bank 7 92...	100	101½	101¾	−0⅛	+0⅛	6.76
Aucalsa 7⅞ 92	80	98	98½	−0⅛	+1⅛	8.07
Australia 6½ 94	100	104½	104⅞	0	+0⅛	5.94
BNP 6⅞ 92	100	97⅛	97⅝	−0⅛	+0½	7.14
Cse. Nat. l'Energie 7 92	100	100½	101	−0⅛	−0⅛	6.89
CFE-Mexico 8⅛ 92	50	97	97⅛	−0⅞	+0⅛	8.69
Co-op. Denmark 8⅛ 92	25	105⅛	105⅝	+0⅛	+0⅛	7.56
Crown Zellerbach 6⅞ 92	100	99⅝	99⅞	0	0	6.78
Europarat 7⅛ 92	100	100⅛	100⅝	−0⅛	+0⅛	7.17
Ind. Fund Finland 6⅞ 92	30	98⅛	99	0	−0⅛	6.94
Japan Dev. Bank 6 94...	100	100⅜	100⅝	0	+1⅛	5.94
Kobe City 6⅛ 92	100	100½	100⅞	−0⅛	+0⅛	6.04
Kommunlane 7⅛ 92 ...	35	101⅜	101⅝	+0⅛	+1⅛	7.05
Lonrho Int. Fin. 7½ 92	80	95	95⅛	0	+0⅛	8.23
Mitsui OSK 6⅛ 92	100	99½	100	−0⅛	+0½	6.53
Nafinsa 8⅛ 92	80	94	94⅛	−0⅛	−1⅛	9.17
New Zealand 6 92	100	101⅛	101⅝	+0⅛	+1⅛	5.81
Philip Morris 6⅛ 92 ...	100	103½	104	+0⅛	+1	6.10
Philip Morris 6⅛ 94 ...	100	101⅛	101⅝	+0⅛	+0⅛	6.07
Renfe 7⅛ 92	80	97⅛	97⅝	−0⅛	+0½	8.16
Sekisui Pre. 5⅞ 92 WW	70	103⅞	104⅜	0	+0⅛	5.21
Soc. Lux. de Cnt. 8⅜ 92	80	105	105⅛	−0⅛	−0½	7.24
Svenska Handels. 6⅞ 92	100	98⅛	98⅝	+0⅛	+0⅛	6.96
Tiroler Wasser 6⅛ 92	100	97⅛	97⅝	0	+1⅛	6.60
Vorarlberg Kraft 6⅞ 92	50	102½	103	+0⅛	0	6.36

Average price changes... On day 0 on week +0⅛

YEN STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
EIB 8⅛ 92	15	97⅝	98⅛	0	+0⅛	8.59
Int.-Amer. Dev. 8⅞ 91	15	100⅞	101⅜	0	−0⅛	8.66
Japan Airlines 7⅞ 87...	9	95⅛	95⅞	0	0	9.09
New Zealand 8⅜ 87 ...	15	99⅝	100⅛	+0⅛	+0⅛	8.34
World Bank 8⅜ 92 ...	20	98⅛	99½	+0⅛	+0⅛	8.50

Average price changes On day 0 on week +0⅛

OTHER STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Bell Canada 16 89 C$...	100	†97	97½	0	+0⅛	16.65
Can. Pac. S. 16⅛ 89 C$	50	†98	98½	0	+0⅛	16.77
Crd. Foncier 17⅛ 89 C$	30	†98½	99	0	−0⅛	17.39
Gaz Metro. 17⅛ 90 C$	20	†97½	98	0	+0½	17.76
OKB 16⅜ 88 C$	63	†97⅛	97⅝	0	+0⅛	16.93
Q. Hyd. 16½ 89 (My) C$	50	†99	99½	0	−0⅛	16.65
Quebec Prov. 16½ 89 C$	50	†99	99½	−0⅛	−0½	16.64
U. Bk. Nwy. 9½ 90 EUA	18	92⅞	93⅞	+0⅛	+0⅛	10.82
Amro Bank 10 87 Fl ...	150	100	100½	−0⅛	+1⅛	9.91
Bk. Mees & H. 10 87 Fl	75	98⅛	98⅝	+0⅛	+1⅛	10.39
Eurofima 10½ 89 Fl	50	100⅜	100⅞	+0⅛	+1	10.34
Ireland 10½ 87 Fl	75	98½	99	+0⅛	+1⅛	10.81
Phil. Lamps 10⅛ 87 Fl...	100	101⅛	101⅝	+0½	+1⅛	9.85
World Bank 10 87 Fl ...	150	98⅛	98⅝	+0⅛	+0⅛	10.39
OKB 14 86 FFr	400	92⅞	93⅜	−0⅛	0	16.59
Solvay et C. 14⅜ 86 FFr	200	92½	93½	0	+0⅛	17.39
Beneficial 14⅛ 90 £ (D)	20	88	88⅜	+0¼	+0⅛	16.87
BFCE 14½ 87 £	30	99⅝	100⅛	+0⅛	+0⅛	14.52
BNP 13½ 91 £	15	94⅞	95⅜	+0⅛	+0⅞	14.46
CECA 13½ 88 £	20	95⅝	96⅛	+0⅛	+0⅛	14.47
Fin. Ex. Cred. 13⅜ 86 £	15	97⅛	98⅛	+0⅛	+0⅛	14.48
Gen. Elec. Co. 12½ 89 £	50	94⅝	95⅛	+0⅛	+1⅛	13.68
Hiram Walker 14⅛ 86 £	25	98½	99½	+0⅛	+0⅛	14.55
Norsk Hydro. 14½ 87 £	30	99⅝	100⅛	+0½	+0⅛	14.53
Privatbanken 14⅛ 88 £	12	96½	97½	−0⅛	+0⅛	15.27
Quebec 15½ 87 £	35	102⅛	103⅛	+0⅛	+0½	14.59
Reed (Nd) NV 16⅛ 89 £	25	105⅛	106⅛	+0⅛	+1⅛	15.27
Royal Trustco 14 86 £...	12	99	100	+0⅛	+0⅛	14.11
SDR France 15½ 92 £...	30	100½	101½	+0⅛	+0⅛	15.28
Swed. Ex. Cr. 13⅜ 86 £	20	98⅛	99⅛	+0⅛	+0⅞	14.09
Eurofima 10½ 87 LuxFr	500	95⅛	96⅛	−0⅛	−0⅛	11.59
EIB 9⅜ 88 LuxFr	600	92⅞	93⅞	0	0	11.46

FLOATING RATE NOTES	Spread	Bid	Offer	C.dte	C.cpn	C.yld
Allied Irish 5⅛ 92	0¼	98	98½	16/10	15.69	15.97
Bk. of Tokyo 5⅛ 91 (D)	0⅛	99	99½	8/12	15⅛	15.37
Bk. Nova Scotia 5⅛ 93	0¼	98⅞	99⅜	29/10	15⅜	15.30
BFCE 5⅛ 88	0¼	98⅞	99⅜	28/10	15	15.17
BFCE 5⅛ 87	0⅛	99⅛	99⅝	27/7	16⅛	16.33
BNP 5⅛ 89 WW	0⅛	*†98⅛	98⅞	6/11	15.19	15.40
Caisse Nat. Tele. 5⅛ 90	0¼	99	99½	21/10	15⅛	15.87
CCCE 5⅛ 2002	0⅛	98⅛	98⅝	11/12	15⅛	15.61
CEPME 5⅛ 92	0⅛	99⅛	99⅝	10/12	15.44	15.55
Chemical NY 5⅛ 94 ...	‡0⅛	99⅛	99⅝	23/9	16.69	16.79
CIBC 5⅛ 94	0⅛	†97⅛	97⅝	15/1	15⅛	15.66
Cont. Illinois 5⅛ 94 ...	‡0⅛	99⅝	100⅛	24/9	16⅞	16.38
Credit Agricole 5⅛ 97...	0⅛	99	99½	24/9	15.44	15.55
Credit du Nord 5⅛ 92...	0⅛	99⅛	99⅝	23/12	16.81	16.90
Credit Lyonnais 5⅛ 97...	0⅛	99⅛	99⅝	1/10	16	16.06
Credit Lyonnais 5⅛ 94...	0⅛	99⅝	100⅛	1/1	16.94	16.94
Credit Nat. 5⅛ 94	‡0⅛	98⅜	98⅞	9/9	14.69	14.89
Ireland 5⅛ 89/94	0⅛	†98⅛	98⅝	25/11	14⅞	14.97
Kansallis Osake 5½ 92	0⅛	99⅛	99⅝	6/11	15.31	15.41
Lloyds Eurofin 5⅛ 93 ...	§0⅛	98⅞	99⅜	29/10	17⅛	17.28
Long Term Cred. 5⅛ 92	0⅛	98	98½	29/11	14⅝	14.90
J. P. Morgan 5⅛ 97 ...	§0⅛	98⅞	99⅜	12/8	14⅝	14.75
Nat. West. Fin. 5⅛ 91...	§0⅛	99⅛	99⅝	15/7	15.19	15.28
New Zealand 5⅛ 87 ...	0⅛	98⅞	99⅜	7/10	15.56	15.64
Nippon Credit 5⅛ 90...	0⅛	99	99½	10/8	16.06	16.18
Offshore Mining 5⅛ 91	0⅛	98⅞	99⅜	2/12	14.19	14.33
PKbanken 5 91	0⅛	99	99½	17/12	15.81	15.93
Scotland Int. 5⅛ 92......	0⅛	98½	99	23/9	15⅛	15.57
Sec. Pacific 5⅛ 91	0⅛	98⅞	99⅜	24/11	15	15.13
Societe Generale 5⅛ 95	0⅛	99	99½	1/9	15.31	15.43
Standard Chart. 5⅛ 91	0⅛	98⅜	98⅞	18/11	14⅞	15.08
Sweden 5⅛ 89	0⅛	99	99½	26/8	15.31	15.43
Toronto Domin'n 5⅛ 92	0⅛	98⅜	98⅞	11/8	16⅛	16.60

Average price changes... On day 0 on week +0⅛

CONVERTIBLE BONDS	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
Ajinomoto 5⅛ 96	7/81	933	85	86½	+0⅞	11.56
Bow Valley Inv. 8 95...	4/81	23.12	94½	96⅛	−0⅛	69.39
Bridgestone Tire 5½ 96	3/82	470	83⅛	84⅛	+0⅛	0.03
Canon 6⅛ 95	1/81	829	84	86	+0⅛	18.28
Canon 7 97	7/82	748.2	94⅛	96⅛	+2⅛	3.63
Chugai Pharm. 7⅛ 96...	7/82	709.8	†99½	100	+0⅛	6.74
Fujitsu Fanuc 4½ 96......	10/81	5641	†77	79	+0⅛	13.97
Furukawa Elec. 5⅛ 96...	7/81	300	†78	79½	0	−7.73
Hitachi Cable 5⅛ 96......	2/82	515	79½	81	+0⅞	5.17
Hitachi Cred. Cpn. 5 96	7/81	1612	†73	75	−0⅛	12.92
Honda Motor 5½ 97......	3/82	841	84⅛	85⅛	+1⅛	7.71
Kawasaki 5⅛ 96	9/81	229	62½	64	+0⅛	21.10
Marui 6 96	7/81	846.4	94⅛	96⅛	+0⅛	3.69
Minolta Camera 5 96...	10/81	876.4	†61	62½	0	36.85
Minorco 9⅛ 97	5/82	8.16	†79½	81½	+1½	15.46
Murata 5⅛ 96	7/81	2168	66½	68	+0⅛	21.17
NKK 6⅛ 96	7/81	188	73	74½	+0⅛	−17.23
Nippon Chemi-C. 5 91...	10/81	919	†61	63	+0½	25.54
Nippon Electric 5⅛ 97...	2/82	846	85⅛	96⅛	+0⅛	9.42
Orient Finance 5⅛ 97 ...	3/82	1205	86	87½	+0⅛	9.06
Sanyo Electric 5 96......	10/81	652	†62½	64	0	16.43
Sumitomo Elec. 5⅛ 97...	3/82	577.3	82	83½	+0½	11.68
Sumitomo Met. 5⅛ 96...	10/81	296.1	66	62½	+0⅛	42.56
Swiss Bk. Cpn 6⅛ 90...	9/80	191	73½	75½	+0½	32.99
Konishiroku 6 90 DM ...	2/82	585	100½	101½	+1½	5.19
Mitsubishi H. 6 89 DM	2/82	263	89⅝	90⅝	−0⅛	35.68

* No information available—previous day's price.
† Only one market maker supplied a price.

Straight Bonds: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week=Change over price a week earlier.

Floating Rate Notes: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte=Date next coupon becomes effective. Spread=Margin above six-month offered rate (‡ three-month; § above mean rate) for U.S. dollars. C.cpn=The current coupon. C.yld=The current yield.

Convertible Bonds: Denominated in dollars unless otherwise indicated. Chg. day=Change on day. Cnv. date=First date for conversion into shares. Cnv. price=Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem=Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

NORTH AMERICAN QUARTERLY RESULTS

ALLIED CORPORATION

	1982 $	1981 $
Second quarter		
Revenue	1.59bn	1.58bn
Net profits	82.0m	87.0m
Net per share	2.01	2.40
Six months		
Revenue	3.2bn	3.16bn
Net profits	145.0m	171.0m
Net per share	3.39	4.73

C. P. BARD

	1982 $	1981 $
Second quarter		
Revenue	94.0m	79.8m
Net profits	6.5m	5.5m
Net per share	0.67	0.56
Six months		
Revenue	184.8m	161.5m
Net profits	24.4m	20.5m
Net per share	1.32	1.10

BUCYRUS ERIE

	1982 $	1981 $
Second quarter		
Revenue	176.2m	117.1m
Net profits	6.8m	16.8m
Net per share	0.34	0.82
Six months		
Revenue	342.8m	220.2m
Net profits	14.5m	25.4m
Net per share	0.71	1.24

EASTERN GAS & FUEL ASSOCIATES

	1982 $	1981 $
Second quarter		
Revenue	315.5m	175.7m
Net profits	14.4m	†3.23m
Net per share	0.63	†0.15
Six months		
Revenue	746.4m	523.2m
Net profits	37.6m	18.0m
Net per share	1.65	0.79

GEORGIA PACIFIC

	1982 $	1981 $
Second quarter		
Revenue	1.41bn	1.44bn
Net profits	71.0m	55.0m
Net per share	0.68	0.52
Six months		
Revenue	2.61bn	2.79bn
Net profits	96.0m	107.0m
Net per share	0.91	1.01

GREAT WESTERN FINANCIAL CORPN.

	1982 $	1981 $
Second quarter		
Revenue	297.1m	295.5m
Net profits	†12.8m	†764,000
Net per share	†0.57	†0.04
Six months		
Revenue	591.1m	570.0m
Net profits	†27.5m	77,000
Net per share	†1.22	—

JOY MANUFACTURING

	1981-82 $	1980-81 $
Third quarter		
Revenue	285.0m	269.5m
Net profits	20.7m	21.7m
Net per share	1.05	1.11
Nine months		
Revenue	858.1m	792.0m
Net profits	72.5m	58.2m
Net per share	3.89	2.97

LENNOX

	1982 $	1981 $
Second quarter		
Revenue	54.1m	58.4m
Net profits	4.0m	3.9m
Net per share	0.89	0.88
Six months		
Revenue	109.3m	112.2m
Net profits	6.0m	5.9m
Net per share	1.36	1.33

LIBERTY NAT. BANCORP

	1982 $	1981 $
Second quarter		
Net profits	2.0m	1.8m
Net per share	1.68	1.49
Six months		
Net profits	4.1m	3.7m
Net per share	3.34	3.01

NORTH AMERICAN PHILIPS

	1982 $	1981 $
Second quarter		
Revenue	799.3m	743.0m
Net profits	17.4m	19.4m
Net per share	1.26	1.44
Six months		
Revenue	1.53bn	1.35bn
Net profits	29.7m	34.5m
Net per share	2.16	2.57

† Loss

German chemicals group closes plants and cuts workforce

BY KEVIN DONE IN FRANKFURT

CHEMISCHE Werke Hüls, the chemicals subsidiary of Veba and the third largest plastics producer in West Germany, is being force dto cut its workforce, impose short-time working and close some plants in order to halt a drastic decline in profitability.

Hüls produced its worst financial performance for more than 10 years in 1981, only just avoiding the drop into loss with an after-tax profit of DM 600,000 ($240,000), compared with a surplus of DM 62.1m in 1980 and DM 84.1m in 1979. The company has operated at a loss so far this year,

While turnover increased modestly by 4.9 per cent to DM 5.98bn, the volume of sales dropped sharply by 13.3 per cent to 51m tonnes. The volume of domestic sales plunged by 17.9 per cent, while foreign sales fell by 4.7 per cent.

Hüls is suffering mostly in commodity plastics, especially PVC (polyvinyl chloride), and its fertiliser businesses.

Around 1,500 workers involved in PVC and polystyrene production at the company's Marl plant are being put on short-time work for two months and a further 70 engaged in urea production at Brunsbüttel are to go on short-time working for four months until the end of November.

Overall, Hüls is aiming to reduce its workforce by around 2,200 by the end of 1984—800 jobs have already gone—chiefly through early retirement, voluntary redundancy and a stop on new recruiting. At the end of 1981 the company had a workforce of 17,747.

Hüls plants worked last year at 77 per cent of capacity compared with 79 per cent in 1980. In the first five months of 1982, capacity utilisation was down to 70 per cent.

The costs of manufacturing several products have risen much faster than selling prices in the last 18 months and for PVC prevailing prices last year were 1 per cent below the 1979 level. Energy costs account for 55 per cent of the manufacturing costs of PVC, and petrochemicals feedstock prices rose by 30-70 per cent last year, biting deeply into Hüls profit margins.

Hüls is still being hit by falling volume sales.

New structure for Italian power equipment industry

BY JAMES BUXTON IN ROME

THE TWO leading companies in Italian power station equipment, Ansaldo and Franco Tosi, have agreed in principle on a new structure for the troubled industry.

Ansaldo, which is part of the state owned IRI-Finmeccanica group, and Franco Tosi, which is a private sector concern, have put to the Government proposals both to try to strengthen the position of Italian companies in export markets and to help those Italian electro-mechanical companies which are in difficulties.

The proposals appear likely to be accepted and should lead to the Government giving financial assistance to the industry which has been weakened by government delays in going ahead with new power station orders. Only one large plant has been started since 1975.

Under the proposals a consortium of public and private sector electro-mechanical concerns called GIE, which has the capacity to deliver complete plants in export markets, will be dissolved and reconstituted under the leadership of the Genoa-based, Ansaldo.

At the same time a second company, also dominated by Ansaldo, would be set up to help the private sector concerns

Hapag climbs out of the red

By Our Frankfurt Staff

HAPAG-LLOYD, the West German shipping and travel company, achieved a significant recovery last year, producing a group after-tax profit of DM 13.2m ($5.3m) compared with a loss of DM 31.5m in 1980—although it is still deeply dissatisfied with its financial performance.

The concern was helped by the strength of the dollar against the D-mark as well as by a marked improvement in the performance of its cargo liner services, which added DM 56m more to pre-tax profits than in 1980.

Last year's recovery came after the company's worst 12 months in the post-war period. The parent company remained in deficit in 1981 with an after-tax loss of DM 7.5m compared with a loss of DM 21.6m in 1980.

Group turnover jumped by 24 per cent to DM 4.3bn last year, chiefly as a result of the strength of the dollar and through the inclusion for the first full year of the cargo route to the Middle East and the Indian Ocean, which was taken over from the bankrupt DDG Hansa group in September 1980.

Hapag-Lloyd remains financially weak with shareholders funds accounting for only 10.5 per cent of total liabilities compared with 10.7 per cent in 1980.

The company continued to suffer from the "desolate" state of the world tanker market and again had to make provisions against the sizeable risks in this sector.

Of total sales last year of DM 4.4bn, about DM 3bn was derived from cargo liner services, DM 189m came from harbour and coastal services, DM 123m from ship building and ship repair, DM 714m from tourism, including the Hapag-Lloyd airline, and DM 271m from haulage.

The company's haulage activities continued to run up considerable losses despite measures to streamline the operations, and losses of DM 5.2m were also accumulated by the shipyard activities. Book profits from the planned sale of aircraft helped to keep the airline narrowly out of deficit.

The main hope for further improving profits in 1982, said the company, lay in efforts to cut costs and increase productivity. With world trade stagnating or in recession there was little hope of increasing sales revenues.

Orders decline at Hochtief

By Our Financial Staff

ORDER books at Hochtief, the West German construction group, had fallen to DM 4.1bn ($1.64bn) at the end of June, from DM 5.3bn at end-June 1981 and DM 4.4bn at the end of 1981.

Herr Enno Vocke, managing board chairman, told the annual meeting that foreign construction output totalled DM 1.1bn after DM 2.85bn in the whole of 1981. Foreign orders totalled DM 2.1bn, against DM 2.48bn at end 1981.

Domestic building completed fell by 12 per cent in the six months to DM 1.12bn, following lower income orders in 1981. But domestic incoming orders revived in the half year to stand at DM 1.3bn at end-June. However, no end is in sight to the domsetic building crisis which is being made worse by public sector building cuts, Herr Vocke said.

Elf transfers $200m to service takeover loans

BY DAVID MARSH IN PARIS

ELF AQUITAINE, the French state-controlled oil company, faces a cash drain of about $200m this year to pay interest charges on bank loans arranged last year to finance its takeover of Texasgulf, the U.S. energy and mining concern.

The need to transfer funds abroad to finance the takeover—carried out a year ago to build up Elf's transatlantic energy business—carries the risk of embarrassing the French Government, which has a two-thirds stake in Elf.

Concerned with protecting the franc, the French Finance Ministry originally asked that the deal should be carried out without sparking off capital outflows. But, according to reports in Paris, the Government has been forced to give reluctant authorisation to the transfers because of worse-than-expected financial results at Texasgulf, which has been hit by weak phosphate sales—a major component of its raw materials business.

Elf is now expected to transfer to foreign banks about FFr 1.4bn ($202m) during the course of this year in the form of interest charges on dollar loans. The original plan was for the debt servicing to be covered from Texasgulf's profits.

Elf has already been involved in controversy with the state this month over the Government plans to limit increases in domestic petrol prices this summer.

ABN expects rise in bad debts

BY OUR FINANCIAL STAFF

ALGEMENE Bank Nederland, one of the big three Dutch commercial banks, expects first half net profit to be little changed from the Fl 196.3m ($71.4m) of the same 1981 period, despite a "major rise" in general risk provisions.

In a prospectus for a Fl 100m bond issue, the bank says additions to its general risk provisions will again be substantial. These rose to Fl 495m in 1981 from Fl 300m in 1980.

Despite the need to provide substantially greater cover against bad debts, ABN managed to improve its earnings last year. After tax, these rose by an eighth to Fl 342m, against Fl 309m.

The bank's planned bond issue is a 20-year offering on a coupon of 11¼ per cent. The bond will be priced next Tuesday and subscriptions have to be in two days later.

Douwe Egberts sees hard year

By Walter Ellis in Amsterdam

DOUWE EGBERTS, the leading Dutch coffee trader, expects extremely difficult trading conditions over the next 12 months, with net profits falling as low as Fl 125m ($45.9m). In the 12 months to the end of June, DE made a net profit of Fl 202m, with 51 per cent of sales generated overseas.

It forecasts a higher proportion of foreign business but worldwide demand will continue to fall,

DE is part of the Consolidated Foods of the U.S. Two months ago, DE sold its U.S. subsidiary, Superior Foods, to the parent company and opened a new, aggressive phase in its marketing in the Netherlands by announcing that it intended to undercut the coffee prices of its Dutch competitors.

It is too early yet to say what effect the price war has had. DE already held close to 60 per cent of the domestic market for coffee and could only expect real gains at the expense of Van Nelle, which last year made a profit of just over Fl 30m.

Heavy research spending weighs on Honda results

BY RICHARD C. HANSON IN TOKYO

HONDA MOTOR Company, the Japanese car and motorcycle group, has reported a 33 per cent drop in consolidated net profit to Y17.178bn ($67.1m) in its first quarter, ended May 31.

The company, however, attributed most of the decline to a steep rise in its spending on research and development and to seasonally high inventory costs in advance of a peak sales period.

Sales advanced 13 per cent to a record quarterly high of Y540.7bn. Domestic sales jumped 28 per cent, while exports (70 per cent of the total) gained only 7.5 per cent.

Honda's overseas unit sales of motorcycles and cars actually fell 20 per cent and 3 per cent, respectively, in the first quarter compared with a year earlier. Shipments were hurt by a drop in demand in parts of Southeast Asia, Iran and other markets.

An agreement to restrain exports to the U.S. market, announced in June last year, kept U.S. sales flat. Honda plans to start up production of cars in the U.S. in November this year. It aims to produce 70,000 units in 1983, or about one-fifth of its current sales volume in America.

Domestic car sales rose 21 per cent to 94,000 units (compared with 181,000 cars sold overseas). This was partially the result of brisk sales of the City, a 1,200cc model, introduced late last year. Honda sold 34,000 City units.

The steep drop in net income reported for the quarter reflected a Y7.1bn increase in R & D costs (to Y18.8bn). A steep rise in interest costs and a drop in equity income from unconsolidated subsidiaries were recorded.

Honda cites the expenses associated with an "aggressive" schedule for introducing new products this year in accounting for the decline in its earnings. About 30 new motorcycle models have been put on sale in anticipation of the summer sales season. Honda is the world's largest manufacturer of motorcyles.

Australia tops rush for freed yen loans

By Our Tokyo Correspondent

A LONG-TERM loan fo Y20bn ($80m) to Australia, the largest single yen loan to a sovereign borrower since Japanese rules were relaxed in May, has been completed with 40 banks and financial institutions participating, it is understood.

This brings the total estimate for sovereign calls on hte Japanese yen long-term loan market to a record Y192bn ($750m) for the April-September half year. An unprecedented scramble to arrange syndications occurred after the Ministry of Finance opened the market to all types of borrowers on May 13. It is believed that banks have now used up virtually all of their loan prgorammes for the half year.

Under such circumstances, bankers had expressed concern over whether the market could absorb smoothly a loan the size of the Australian borrowing (Australia initially aimed at raising Y30bn). The Long-Term Credit Bank of Japan led the Australian syndication.

Meanwhile, the signing ceremony was held yesterday for one of the largest of the other yen loans to be marketed this half-year. Caisse Nationale des Autoroutes (CNA), a French public financial agency, has borrowed Y12bn for 10 years.

France ranks as the top national borrower for the half-year, with four deals totalling Y37bn. CNA is the largest borrower of the four.

Both the Australian and CNA loans carry the terms specified by the authorities for fixed rate long term yen loans of 0.2 per cent over the Japanese long term prime rate (curently 8.4 per cent). The CNA loan includes a five-year grace period.

The rush of yen lending means that total long-term yen loans during this half of the fiscal year will probably exceed slightly the Y350bn lent in the previous six months, before sovereign borrowers were allowed into the market.

The Ministry of Finance, however, has already indicated that long-term yen lending in the six months beginning October may be down from the current half's total. This is partly because demand for credit from the government itself will be up sharply. The authorities are also cautious about the impact of such capital outflows on the yen's exchange rate. The Ministry has abandoned its previous practice of setting an overall ceiling on yen lending. Instead, the amount of lending is controlled by the monitoring each month of the individual "loan programmes"

Bahrain awards more banking licences

By Mary Frings in Bahrain

THE BAHRAIN Monetary Agency has approved 11 applications for banking licences from among nearly 40 applications. Artoc Bank and Trust, a mainly Arab-owned institution registered in the Bahamas in 1977, was the only applicant to be granted a full Offshore Banking Licence (OBU). Nomura Investment Banking (Middle East) EC, a Bahrain-registered subsidiary of the Japanese securities house, was granted an Investment Banking Licence (IBL).

Manufacturers Hanover Trust Company, which already has an OBU in Bahrain, obtained a licence to open a regional office. Other representative office licences went to Deutsche Bank, Yasuda Trust and Banking Company, European American Bank and Trust Company, Marine Midland Bank, Banco do Commercia e Industria de Sao Paula (COMIND), International Commercial Bank of China (Taiwan), Bank Negara Indonesia, and Hokkaido Takushoku Bank.

The number of licences held by Japanese banks and securities houses in Bahrain now stands at 21, but 19 of them are for representative offices. There were no previous representatives of Taiwan or Indonesia.

Consideration of licence applications from newly formed banks and investment companies wishing to offer shares to the public is subject to a 12-month moratorium imposed by the BMA at the beginning of this year. Many of those passed over in the latest batch of awards are believed to be in this category.

Toyota Motor forecasts growth of world markets

TOKYO — Toyota Motor Corporation hopes to sell 2m vehicles a year in Japan by 1985 compared to 1.5m last year, Mr Shoichiro Toyoda, president, said.

Sales in the Japanese market, already the world's second largest after the U.S., are over 5m vehicles annually and will be 30 per cent bigger by the 1990s.

Worldwide demand will also increase 30 per cent by then, with expansion particularly noteworthy in the Middle East, Africa and Central and South America, he added.

Over the next few years Toyota will pay greater attention to markets in Asia, Africa, Oceania and Central and South America. It will also expand overseas facilities, especially knock-down production operations.

Mr Toyoda hoped that talks with General Motors of the U.S. on joint-production of a Toyota-designed small car in the U.S. would be successful soon, but he gave no details on the current state of negotiations.

Toyota is looking at ways to employ alternate energy sources such as hydrogen and battery driven engines.

Meanwhile, he criticised proposed legislation in the U.S. to ensure vehicles sold there have a percentage of locally made parts.

The legislation could have the "effect of not only restricting competition and running contrary to the best interests of American customers, but in the long-term being disadvantageous to the U.S. economy." Reuter

$300m credit planned by Gulf Petrochemical

BY OUR BAHRAIN CORRESPONDENT

A CONSORTIUM of Arab banks and investment companies led buy Gulf International Bank (GIB) has been awarded the mandate for a $300m credit for Gulf Petrochemical Industries Company, a joint-venture between Bahrain, Kuwait and Saudi Arabia.

The lead management group include Arab Banking Corporation (ABC), Arab Petroleum Investment Corporation (Apicorp), Kuwait Foreign Trading Contracting and Investment Company (KFTCIC) and the National Bank of Bahrain.

Dr Tawfeeq Almoayed, chairman of GPIC, said the terms for a proposed five-year loan, with a two-year grace period, were the lowest achieved for a project in Bahrain. The margin is believed to be ½ per cent over the Bahrain inter-bank offered rate.

Dr Almoayed in addition said to export credit offers from Italy and Japan, GPIC is seeking further offers from the UK, France, Germany and the U.S.

Reclammation from the sea of a 600,000 sq metre site for GPIC's ammonia and methanol complex has been completed and topographical surveys and soil analyses are now in progress. The plant is due for completion by the end of 1984. The main contractor is Snam Progetti of Italy.

This advertisement appears as a matter of record only.

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U.S. $600,000,000

Medium Term Loan

Unconditionally guaranteed by

The Republic of France

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Chase Manhattan Capital Markets Group
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The Mitsui Bank, Limited
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Commerzbank Aktiengesellschaft   Continental Illinois Limited
Crédit Lyonnais   Crocker National Bank   The Dai-Ichi Kangyo Bank, Limited
The Fuji Bank, Limited   Mitsubishi Bank (Europe) S.A.
Morgan Guaranty Trust Company of New York   National Westminster Bank Group
Nederlandsche Middenstandsbank N.V.   The Nippon Credit Bank, Ltd.
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RepublicBank Dallas, N.A.   The Sanwa Bank, Limited   Scandinavian Bank Limited
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Nederlandsche Middenstandsbank N.V. *New York Branch*   The Nippon Credit Bank, Ltd.   Republic National Bank of New York
Security Pacific Bank   *Banca Nazionale del Lavoro Paris Branch*   *Banco de Bilbao S.A.*   *BancOhio National Bank*
Banque Française du Commerce Exterieur *New York Branch*   Crédit Agricole   Crédit Industriel et Commercial
The Long-Term Credit Bank of Japan, Limited   National City Bank, Cleveland Ohio   Pittsburgh National Bank *Paris Branch*
RepublicBank Dallas, N.A.   The Sanwa Bank, Limited   Scandinavian Bank Limited   Seattle-First National Bank
The Tokai Bank, Limited   Allied Irish Banks Limited   Westdeutsche Landesbank Girozentrale
The Daiwa Bank, Limited   The Sumitomo Trust and Banking Co., Ltd.   The Taiyo Kobe Bank, Limited
Banque de l'Union Européenne *New York Branch*   First Pennsylvania Bank N.A.   Manufacturers National Bank of Detroit
Midlantic National Bank   The Royal Bank of Scotland plc   Banco Portugues do Atlantico
The Riggs National Bank of Washington D.C. London Branch   State Bank of India   London Interstate Bank Limited

June, 1982

Moët-Hennessy

The Annual General Meeting of shareholders held in Paris on 24th June 1982 and chaired by Mr. Frederic Chandon de Briailles approved the consolidated accounts and balance sheet for the year ended 31st December 1981.

A dividend of FF 16 per share was declared for the year, together with a tax credit of FF 8, so that the total dividend amounts to FF 24.

An interim dividend of FF 7 per share was paid on 1st February 1982. The balance of FF 9 per share will be paid on or about 5th July 1982 against Coupon No. 34.

The Annual General Meeting also re-appointed as directors for six years Mr. Kilian Hennessy and Mr. Jacques Mercier.

Mr. Frederic Chandon de Briailles informed the meeting that he intended to resign as Chairman and asked the Board to consider appointing Mr. Alain Chevalier, at present Vice-Chairman and Managing Director, in his stead.

In a meeting held after the AGM, the Board of Directors expressed regrets at Mr. Frederic Chandon de Briailles' decision and thanked him for his leadership of the Group over the past six years. The Board then appointed Mr. Alain Chevalier as Chairman of Moët-Hennessy.

The Board also re-appointed Mr. Alain de Pracomtal as Managing Director.

Lastly, the Board appointed Mr. Kilian Hennessy as President and Mr. Frederic Chandon de Briailles and Mr Alain de Pracomtal as Vice-Chairmen.

The Annual Report, *which is available in both French* and English, can be obtained from the Company's registered office at 30 Avenue Hoche 75008 Paris.

Base Rate Change

BANK OF BARODA

Bank of Baroda announce that, for balances in their books on and after 16th July, 1982 and until further notice their Base Rate for lending is 12% per annum. The deposit rate on all monies subject to seven days' notice of withdrawal is 9% per annum.

Notice to the Holders of
ORIENT LEASING (CARIBBEAN) N.V.
U.S. $20,000,000 8¼%
Guaranteed Notes Due 1983

Effective August 2, 1982, the specified office of The Industrial Bank of Japan Trust Company as Paying Agent for the above-described issue will be

245 Park Avenue
New York, N.Y. 10167 U.S.A.

July 16, 1982

Notice to the Holders of
MITSUBISHI GAS CHEMICAL COMPANY, INC.
U.S. $20,000,000 6%
Convertible Bonds Due 1992

Effective August 2, 1982, the specified office of The Industrial Bank of Japan Trust Company as Principal Paying Agent for the above-described issue will be

245 Park Avenue
New York, N.Y. 10167 U.S.A.

July 16, 1982

Banco de Chile

Banco de Chile

US $20,000,000

Negotiable Floating Rate Non-London Certificates of Deposit due 1983

For the six months
19th July, 1982 to 19th January, 1983

In accordance with the provisions of the Certificates, notice is hereby given that the rate of interest has been fixed at 15⅝ per cent. per annum, and that the interest payable on the relevant interest payment date, 19th January, 1983 against each Certificate will be US $39,930.56.

Agent Bank
Bank of America International Limited

BUILDING SOCIETY RATES

Every Saturday the Financial Times publishes a table giving details of

Building Society Rates

on offer to the public

For further details please ring:

01-248 8000 Ext. 3606

Notice to the Holders of
DENKI KAGAKU KOGO KABUSHIKI KAISHA
U.S. $20,000,000 7¾%
Guaranteed Notes Due 1982

Effective August 2, 1982, the specified office of The Industrial Bank of Japan Trust Company as Principal Paying Agent for the above-described issue will be

245 Park Avenue
New York, N.Y. 10167 U.S.A.

July 16, 1982

All these Bonds have been sold. This announcement appears as a matter of record only.

NEW ISSUE   June 1, 1982

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Industriebank von Japan (Deutschland) Aktiengesellschaft   Irish Intercontinental Bank Limited   Istituto Bancario San Paolo di Torino
KB Luxembourg (Asia) Ltd.   Kleinwort, Benson Limited   Kredietbank S.A. Luxembourgeoise   Kredietbank (Suisse) S.A.
F. van Lanschot Bankiers N.V.   Lehman Brothers Kuhn Loeb International, Inc.   Lévesque, Beaubien Inc.
Merrill Lynch International & Co.   Samuel Montagu & Co. Limited   Nederlandsche Middenstandsbank N.V.   Nederlandse Credietbank nv
The Nikko Securities Co., (Europe) Ltd.   Nippon European Bank S.A.   Orion Royal Bank Limited   Société Générale
Société Générale Alsacienne de Banque   Swiss Bank Corporation International Limited   Westdeutsche Landesbank Girozentrale   Wood Gundy Limited

WORLD STOCK MARKETS

Wall St edges up at midday

PRICES EDGED higher at mid-session with buyers starting to re-enter the market after an erratic morning performance.

The Dow Jones Industrial Average was up about 2.5 by mid-session at around 830.36 after falling more than three earlier. Advances led Declines by about seven to five and volume totalled some 32m.

The NYSE All Common Index stood at about 63.43 at mid-session.

Analysts said the M1 measure of the money supply was expected to be up sharply, which could prevent the Federal Reserve from easing its monetary policy. The money supply figures are due to be released today.

Drug stocks were among the better performers, with Smithkline Beckman up 1⅞ to $65⅞, Eli Lilly one to $57¼, Pfizer ¼ to $57½ and Syntex ⅞ to $39⅞.

Speculation that oil supplies could be disrupted in the Middle East boosted Domestic Oil shares, with Atlantic Richfield ¼ to $38¼, Standard Oil Ohio ⅝ to $30⅝ and Union Oil California ¼ to $30¼.

Volume leader IBM rose ½ to $67. The stock continues to gain following the news of larger-than-expected second-quarter earnings, reported on Tuesday.

Raytheon shed ⅜ to $38⅜ in heavy trading after reporting only a modest gain in second-quarter earnings.

THE AMERICAN SE Market Value Index rose 1.20 to 249.71 on turnover of about 1.8m shares.

Canada

Gold and Metal stocks led a small gain as the recent firming in commodity prices continued to bolster share values.

The Toronto Composite Index was up four points at 1,395.5 on volume of 2.15m shares. Advances led declines by 169 to 105.

The Metal Index was up 13.7 at 1,315.7 and Golds rose 15.3 to 1,755.0.

Among gaining Metal and Gold issues, Noranda Mines rose ⅜ to C$13⅜, Placer Developments ¼ to C$14, Gibraltar Mines ¼ to C$8¼, Teck Class "B" ⅜ to C$6⅜, and Campbell Red Lake ¼ to C$14.

Dofasco Class "A" was up ⅛ at C$29⅛. The company said it would lay off 2,100 workers indefinitely in November because of a drop in demand for steel products.

Tokyo

Prices gained ground, with interest stimulated by the overnight firmness on Wall Street and the yen's recovery against the dollar.

The Nikkei-Dow Jones Average recouped Wednesday's loss to close at 7,197.77, up 42.77, on light volume of 370m shares. The Tokyo SE Index added 1.77 to 531.97.

Many Blue Chips firmed on limited buying, while non-ferrous Metals and Oils rose sharply in response to Middle East tensions.

Some high-priced Blue Chips popular among foreign buyers eased, but low-priced Domestic Industry issues were higher.

Hong Kong

Stocks extended previous gains to close higher, mainly because of continued speculative buying against prospects of a cut in local interest rates, brokers said.

Prices started at about Wednesday's level, but fresh buying pushed most shares before encountering some late profit-taking.

The Hang Seng Index closed up 13.95 points to 1,313.37. Blue Chips were generally higher while second and third liners developed on a selective basis.

Singapore

Prices closed slightly lower on lack of buying support in quiet selective trading, dealers said.

Central Sugars fell 20 cents to S$10.20, Fraser and Neave 10 to S$5.70, Straits Trading 15 to S$5.15, Development Bank 10 to S$7.50 and Hong Leong Finance 10 to S$6.75.

The Stock Exchange Industrial/Commercial Index fell 4.13 points to 511.94.

Hotels, Properties, Commodities and second trading section were also lower where traded in line with the general trend.

Selangor Properties fell 12 cents to S$3.96, and Hong Leong Industries 20 to S$5.55.

The Straits Times Index shed 5.45 points to 685.32.

Amsterdam

Shares were mixed in fairly quiet trading.

Banks were the weakest sector. ABN fell 4 guilders to 277 as the market reacted negatively to news that it expected first-half 1982 net profit to show little change from the 196.3m guilders in first-half 1981 despite a major rise in general risk provision.

ABN's fall triggered substantial selling of other Bank shares, and NMB fell 6 to 112, while AMRO was 1.90 lower at 45.60.

Paris

Shares were mixed with an easier bias in very quiet trading as prices began to show a reaction to recent firm sessions, dealers said.

Many operators stayed away from the market, taking an extended break after Wednesday's Bastille Day holiday.

Germany

Leading shares closed mixed after an early flurry of Domestic orders dried up and some foreign investors turned sellers in a thin market, dealers said.

The Commerzbank Index edged higher to 684.60 from 684 the previous day and AEG attracted support following the Government decision on Wednesday to extend DM 600m of credit guarantees.

Brussels

Shares were mixed and foreigns lower in moderate trading.

The Industrial Index stood at 93.24 against 93.08 on Wednesday, and the All Shares Index fell to 190.82 from 192.50.

Among Belgian shares, Cockerill and Tessenderloo rose 3 per cent and Arbed rose 2 per cent, while Andre Dumont fell 4 per cent, Reserve, Ebes, Electrafina, Asturienne, Mosane and UCB fell 2 per cent.

In Foreign stocks, Gold mines, UK and Germans were lower, Dutch and Canadians little changed, U.S. and French mixed.

Petrofina rose, but American Petrofina and Canadian Petrofina fell.

Spain

Prices closed broadly higher in quiet trading on bargain-hunting, reflecting increased investor confidence following Tuesday's election of a new leader to head Spain's divided Centrist Party, dealers said.

The Madrid Index rose 1.61 points to close at 88.78. Banks showed particularly strong gains, with leaders advancing between 6 and 8 percentage points and Central rising 10 points.

Australia

News of fighting between Iran and Iraq pushed Metal prices higher, giving much needed direction after the uninspired trading of the past two days, brokers said.

The All Ordinaries Index closed 1.2 points up at 453.7, after falling about two points in the morning.

Oil and Gas stocks firmed on the Midle East news but Golds failed to respond.

Johannesburg

Gold shares recovered partially in moderate trading, as the Bullion price again rose to above $350, but still closed slightly easier against Wednesday's close.

Mining Financials mirrored Golds with Anglos down 20 at R1,090 after R1,075, but in Diamonds, De Beers fell 13 at R445. Platinums shed 5 cents while other Minings and Industrials closed narrowly mixed.

Closing prices for North America were not available for this edition.

LONDON STOCK EXCHANGE

Company statements illuminate drab equity market
Flickering interest rate hopes nudge Gilts higher

Account Dealing Dates
Option

*First Dealings	Declarations	Last Dealings	Account Day
July 5	July 15	July 16	July 26
July 19	July 29	July 30	Aug 9
Aug 2	Aug 12	Aug 13	Aug 23

* "New-time" dealings may take place from 9.30 am two business days earlier.

The bleak prospect of a total rail shutdown from midnight on Tuesday continued to curtail investment activity in London stock markets yesterday. All main sectors, however, presented firm undertones with equity market bolstered by company trading announcements and bid situations. Following Hanson Trust's overnight offer for United Gas, a subsidiary of Pioneer Concrete Services of Australia announced its intention to make a cash bid for Mixconcrete.

Heading the list of companies reporting preliminary trading statements were FT Industrial Ordinary share index constituents Thorn EMI and Distillers. Both made good headway, before closing below the best, but the effect on the index was countered by weakness in Bowater. This stemmed from a report that the group was contemplating the closure of a Canadian mill. Dowty was another blue chip to feature brightly after annual results, while London and Midland Industrials stood out among the lesser lights.

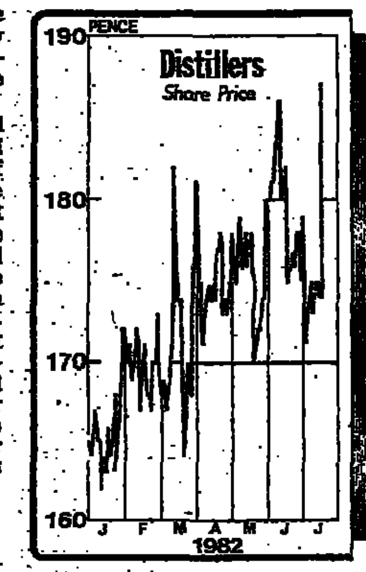
The overall volume of business in equities continued to disappoint. This, more than any other influence, was responsible for the index losing an early gain of about a point and showing a small loss around noon; the close was a net 2.6 up at 556.4.

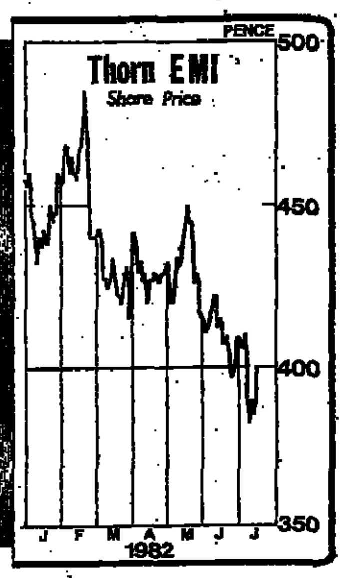
Gilt-edged investors ignored sterling's slightly easier trend yesterday, favouring hopes of lower U.S. interest rates and the chance of another small cut next month in UK clearing bank base rates. The latest U.S. industrial production figures appeared to support U.S. bond prices which augmented London's firmness. Gains of ⅜ occurred throughout the list with the recently-exhausted short tap, £30-paid Treasury Convertible 12½ per cent 1986, gaining that much to 30⅜. The longer-dated Exchequer 13½ per cent 1992, at 103⅜, was among a few stocks to rise ½.

Insurance dull

Insurances succumbed to end-Account profit-taking. Lloyds Brokers, well supported of late on bid hopes, led the retreat with Sedgwick closing 7 down at 167p and C. E. Heath 6 cheaper at 357p. The liquidation of speculative positions in the absence of the rumoured bid from Allianz left Eagle Star 6 lower at 359p. Elsewhere in *Composites, General Accident* gave up 4 to 298p and Royals relinquished 3 to 342p. Hambro Life fell 5 for a two-day decline of 13 at 272p on fears ahead of today's new business figures.

Still reflecting publicity given to a broker's adverse circular, the major clearing banks continued easier. Falls were limited to 6, as in NatWest at 432p.





Preliminary profits in excess of market estimates and an unexpected dividend increase prompted an active trade in Distillers which advanced 13 to 187p, after 188p. Arthur Bell rose 4 to 174p in sympathy. Leading Breweries retained a slightly firmer bias with Arthur Guinness a penny dearer at 86p. Elsewhere, H. P. Bulmer continued to respond to the excellent full-year figures and improved 18 for a two-day gain of 44 to 478p.

Mixconcrete jumped 63 to 178p on the cash offer worth 155p per share from Pioneer Concrete Holdings and highlighted an otherwise uninspiring Building sector. Occasional investment demand lifted Benford Machinery 4 to 54p while Phoenix Timber also gained 4 to 66p.

Among Chemicals, Fisons continued and put on 8 more to 380p.

Institutional investors continued to shy away from leading Stores which finished a shade easier for choice. Preliminary results from Great Universal were much as expected and the A held at 476p. Secondary counters again had little to commend them. Asprey were marked ½ higher at £11¼ following the increased annual profits and dividend accompanied by a 200 per cent scrip issue. Time Products made further progress on recovery hopes and firmed a penny for a two-day gain of 5 at 24p, but d-i-y issues turned dull with falls of 2 common to Home Charm, 163p, and A. G. Stanley, 51p.

Thorn EMI below best

Preliminary profits at the top end of the range and the absence of the much-rumoured rights issue prompted a good rise in recently unsettled Thorn EMI, which touched 413p before closing 10 up on balance at 400p. Elsewhere in Electricals, Eurotherm responded to the increased interim dividend and sharply higher first-half profits with a jump of 22 to 442p, after 445p. Still drawing strength from recent comment, Security Centres added 6 more to 150p, while Henry Wigfall hardened 5 to 107p and Fidelity Radio improved 3 to 53p. Profit-taking after the satisfactory results saw Jones Stroud retreat from an initial firm level of 103p to end a net 2 cheaper at 94p.

Movements in response to company trading statements helped to enliven an otherwise drab trading session in Engineers. *G. M. Firth, reflecting the return* to profitable trading, advanced 13 to 150p, while Braithwaite rose 7 to 125p and Howden Group 5 to 138p following satisfactory preliminary figures. Symonds hardened a penny to 12p on the annual results, while GEI International responded to the encouraging tenor of the chairman's statement with a gain of 3 to 74p. Senior Engineering, in contrast, eased a penny to 25½p, sentiment being unsettled by the proposed closure of the Darlington works operated by its subsidiary, Phoenix Tubeman. Among the leaders, John Brown rallied 3½ to 50½p and GKN 2 to 142p, but TI remained on offer at 98½p, down 1½.

Foods held close to the overnight positions after yet another featureless session. Down to 84p following annual results in line with market expectations, Unigate firmed to close a net penny up at 86p.

United Gas up on bid

Pilkington came on offer among the miscellaneous industrial leaders, falling 9 to 193p after comment on the annual report. Bowater were also dull, ending 7 off at 193p, after 190p, following sporadic offerings and lack of support. Glaxo, however, surged forward again to touch an all-time peak of 800p before closing a net 3 dearer on balance at 796p, with sentiment still buoyed by a broker's upgraded profits forecast; this, in turn, led to a further sympathetic gain of 7 to 296p in Beecham.

United Gas Industries stood out with a jump of 40 to 140p on counter-bid hopes in the wake of the surprise 125p per share cash offer from Hanson Trust. London and Midland Industrials advanced 9 to 88p, after 91p, following better-than-expected annual results, while an investment recommendation lifted Hollis Brothers and E.S.A. 5 to 14p. A dull market of late on the profits warning, Granada "A" rallied 6 to 180p, while investment demand prompted a rise of 14 to 287p in AGB Research. Diploma found renewed support at 168p, up 8, but Christie-Tyler were marked down 2 to 22p, after 21p, on the dividend omission and near-£3m loss for the year.

Trident TV "A" were briskly traded and touched 74p before settling for a net gain of 5 at 73p; the Playboy casino licence appeal is due to be heard later this month. Adverse comment resulted in renewed dullness among holiday tour operators and Horizon eased 3 to 170p, while Intasun shed a couple of pence at 113p.

Down to 132p immediately in front of the announcement, Dowty rallied strongly following better-than-expected annual earnings and closed 9 up on balance at a 1982 peak of 144p. In contrast, Lucas continued to lack support and gave up 4 more to 151p, while Dunlop eased a couple of pence to 64p. Distributors featured Henlys which jumped 9 for a two-day gain of 12 at 95p on renewed speculative demand.

Halved interim profits from Associated Newspapers proved no worse than feared and the shares eased 3 to 175p in very quiet trading; Daily Mail "A" gave up a like amount to 405p in sympathy. East Midland Allied Press "A" advanced 6 to 82p in belated response to the chairman's comments at Tuesday's annual meeting. Bemrose closed 4 cheaper at 140p; the contested offer from Bunzl has lapsed, having gained only nominal acceptance. Bunzl added 2 to 165p, while British Printing and Communication, which now holds almost 20 per cent of Bemrose, held at 34p.

Quietly firm conditions prevailed in Properties. MEPC firmed 4 to 173p as did Greycoat Estates, to 120p, the latter following the preliminary results.

Oils better again

Helped by overnight firmness on Wall Street and by the implications of the Iraq/Iran conflict, Oil shares opened a few pence dearer and improved a little further on scattered investment support. Early interest, however, soon fizzled out and quotations closed below the best. Shell stood out with a gain of 8 at 392p, after 394p, but British Petroleum ended only a couple of pence harder at 266p, after 268p. Lasmo picked up 10 further to 392p.

Golds mixed

Gold shares opened lower in London in line with the previous day's New York dealings, but the apparent steadiness of the bullion price around the $350 level brought in some buying and prices rallied during the day. News of further selling in the U.S. at the Wall Street opening took some of the steam out of the recovery, and many prices closed a little below the previous day's levels.

The Gold Mines index gave up 4.3 to 227.9, and the metal closed at $350, up 50 cents.

Southvaal retained an advance on the day of ⅜ to £14½ while, among the lower-priced issues, Grootvlei closed at 325p, 13 to the good, while Free State Development put on 35 to 175p.

Falls were registered by President Brand at £13⅞, Free State Geduld at £11⅞ and Western Holdings at £13⅜, all about half lower.

about ½ lower.

Harmony lost 14 to 464p, and the holding company Zandpan followed suit with a decline of 27 to 348p.

South African Financials were not so badly hit by the U.S. selling, and "Amgold" closed 1½ to the good at £30⅜, while Gold Fields of South Africa gained 1½ to £28⅞.

In Diamonds, renewed London interest boosted De Beers 4 to 206p.

Elsewhere, Minorco put on 15 to 345p.

Australians were a little firmer, in line with overnight domestic markets. Peko-Wallsend gained 6 to 228p, while CRA, 170p, and Western Mining, 161p, both closed 4 to the good, and MIM Holdings rose 3 to 157p.

Demand for Traded Options continued to contract and only 1,042 deals were taken out, the lowest so far this month. Calls totalled a meagre 757, of which recently popular Imperial Group accounted for 141. Only 285 puts were struck.

FINANCIAL TIMES STOCK INDICES

	July 15	July 14	July 13	July 12	July 9	July 8	A year ago
Government Secs.	71.04	70.86	70.88	71.07	70.44	70.02	65.90
Fixed interest	71.38	71.86	71.51	71.33	71.00	70.55	66.34
Industrial Ord.	556.4	553.8	554.3	557.5	558.7	551.4	529.3
Gold Mines	227.9	232.2	213.6	207.9	194.5	186.6	355.2
Ord. Div. Yield	5.51	5.52	5.55	5.53	5.57	5.58	6.00
Earnings, Yld.% (full)	11.54	11.59	11.66	11.62	11.70	11.67	11.57
P/E Ratio (net) (*)	10.52	10.48	10.41	10.45	10.38	10.42	10.83
Total bargains	14,826	15,241	16,448	16,021	15,069	13,033	16,451
Equity turnover £m.	—	102.42	116.04	116.52	129.48	141.58	143.64
Equity bargains	—	11,137	12,369	12,038	10,786	10,726	13,120

10 am 554.9. 11 am 554.2. Noon 553.5. 1 pm 553.5.
2 pm 554.6. 3 pm 555.6.

Basis 100 Govt. Secs. 16/10/26. Fixed Int. 1928. Industrial 1/7/35. Gold Mines 12/9/55. SE Activity 1974.

Latest Index 01-246 8026.

*Nil=9.80.

HIGHS AND LOWS

	1982 High	1982 Low	Since Compilat'n High	Since Compilat'n Low
Govt. Secs.	71.07 (12/7)	61.89 (5/1)	127.4 (9/1/35)	49.18 (3/1/75)
Fixed Int.	71.66 (14/7)	62.79 (7/1)	150.4 (28/11/47)	50.53 (3/1/75)
Ind. Ord.	594.0 (6/5)	518.1 (5/1)	597.3 (30/4/81)	49.4 (26/6/40)
Gold Mines	302.0 (5/7)	181.2 (22/6)	558.9 (22/9/80)	43.5 (26/10/71)

S.E. ACTIVITY

	July 14	July 13
Daily Gilt Edged Bargains	197.8	215.1
Equities Bargains	72.2	80.1
Value	207.0	234.5
5-day Avrge. Gilt-Edged Bargains	200.2	195.2
Equities Bargains	73.9	73.6
Value	245.0	253.7

RECENT ISSUES

EQUITIES

Issue price p	Amount paid up	Latest Renunc. Date	1982 High	1982 Low	Stock	Closing price p	+ or −	Div. or Amount	Times Covered	Gross Yield	P.E. Ratio
¶¶	F.P.	—	43	40	Anglo-Nordic 5p	40	−1	b0.89	2.0	3.2	22.5
¶¶	F.P.	—	82½	79	Antofagasta Hldgs £1	79	......	7.0	3.6	12.7	2.4
¶¶	—	30/7	16	11	Argyll Foods Warr'ts.	15	......	—	—	—	—
¶¶	F.P.	—	48	41	Argyle Trust	41	−1	—	—	—	—
‡250	F.P.	23/6	287	260	Assoc. Heat Services	283	−4	F9.0	◆	4.5	◆
‡45	F.P.	—	46	45	Atlantis Res. Int.	44	......	—	—	—	—
46	F.P.	30/7	55	50	Bairstow Eves 5p	53	+1	b1.61	2.5	4.3	13.0
§90	F.P.	25/6	101	92	✣Black (Michael) 20p	93	......	u3.0	2.4	4.7	12.7
15	F.P.	15/4	32	19	Cambrian & Gen. 7½p	30	......	—	—	—	—
‡260	F.P.	4/6	450	293	✣Cont. Microwave	450	+20	b5.25	3.9	1.7	16.7
§518	F.P.	30/7	59	52	✣Dencora	52	......	—	—	—	—
§30	F.P.	28/6	170	140	✣Druck Hldgs.	170	......	b3.3	2.5	1.9	29.5
—	F.P.	—	106	104	✣Ecobric New Ord £1	104	−2	bd10.5	1.9	14.4	4.6
—	F.P.	—	63	62	✣ Do. Defd.	63	......	—	—	—	—
§87½	F.P.	25/6	98	84	Electro-Prot. US$0.50	88	......	uQ1.5c	8.6	0.9	11.9
—	—	—	17	10	Group Inv Option	12	......	—	—	—	—
‡60	F.P.	6/8	60	58	✣Knight Cmptr Int 5p	58	......	bd1.6	2.0	3.9	18.5
‡157	F.P.	30/7	196	150	✣McCarthy & Stone	190	......	b5.75	2.7	4.3	11.4
‡105	F.P.	2/7	121	110	✣Miles 33 10p	118	......	ud2.0	4.3	2.4	10.2
600	F.P.	2/7	630	595	Oriflame SA (US$1.50)	620	......	bQ50c	2.2	4.5	9.9
‡150	F.P.	13/8	155	150	✣Oilfield Insp. Srvc	152	......	u2.1	5.7	2.0	17.4
77	F.P.	14/7	97	88	✣Radio City 'A' NV	89	......	b5.6	1.5	9.0	10.4
140	F.P.	29/6	186	160	✣Ruddle (G.) 10p	180	......	b3.3	3.6	2.6	21.3
¶¶	F.P.	—	44	38	Walker (Alfred) 10p	38	−1	b0.75	5.5	2.8	7.1
¶¶	F.P.	—	90	40	Zambia Cons Cpr 10K	60	+5	—	—	—	—

FIXED INTEREST STOCKS

Issue price £	Amount paid up	Latest Renunc. date	1982 High	1982 Low	Stock	Closing price £	+ or −
¶¶	F.P.	—	60p	58p	Antofagasta 3.5% Pref. (£1)	60p	......
‡100	F.P.	9/7	107	99	Benlox 8% Conv. Cum. Rd. Pf.	99	−1
*100	£10	26/8	11¼	10½	Bournemouth Water 9% Red. Prf. 8789	11¼	......
‡100	Nil	29/7	½pm	¼pm	Cronite 14% Cnv. Uns. Ln. '92	½pm	......
¶¶	F.P.	—	146½	130	First Nat. 13½pc Conv. Uns. Ln. 1987	134	......
101	F.P.	30/7	109	107	✣Lon&Cont 11½% Conv. Sub Uns. Ln. '95-02	108	......
‡100	F.P.	9/7	101	91½	Marlborough Props. 10% Cnv. Ln. '98-2002	91½	......
98.55	£25	8/10	27	25¾	Midland Bk. 14% Sub. Uns. Ln. 2002-07	26½	+¼
100	F.P.	—	100⅞	100⅛	Nationwide Bdg. Soc. 13⅛% (3/6/83)	100¼	......
100	F.P.	—	100⅝	99⅞	Do. 14% (4/7/83)	100⅝	......
99.345	£25	—	26½	24⅛	New Zealand 14¼% 1987	26⅝	+⅛
‡100	Nil	23/7	7ppm	¼ppm	Rotaprint 11½% Cum. Conv. Red. Pref.	¼ppm	......

"RIGHTS" OFFERS

Issue price p	Am'unt paid up	Latest Renunc. date ●	Latest Renunc. date ■	1982 High	1982 Low	Stock	Closing price p	+ or −
166	F.P.	9/7	6/8	195	188	Applied Computer Tech.	195	+5
170	F.P.	13/5	24/8	190	180	Bank Leumi (UK) £1	158	......
103	Nil	—	—	15pm	15pm	Blundell-Permoglaze	15pm	......
25	Nil	29/7	26/8	1½pm	1pm	Cronite	1½pm	......
78	Nil	—	—	5pm	3pm	Goal Pet. 5p	5pm	+2
174	F.P.	18/6	30/7	235	218	Grand Met 50p	235	......
25	Nil	26/7	3/9	2pm	2pm	Jenks & Cattell	3pm	......
65	Nil	—	—	10½pm	8pm	Minster Assets	10½pm	......
50	F.P.	24/6	13/8	61	52	Press (Wm.) 10p	60	......
325	F.P.	17/6	30/7	445	380	Saatchi & Saatchi 10p	420	......
215	F.P.	5/7	13/8	263	243	Sketchley	263	......

Renunciation date usually last day for dealing free of stamp duty. *b* Figures based on prospectus estimate. *d* Dividend rate paid or payable on part of capital: cover based on dividend on full capital. *g* Assumed dividend and yield. *r* Indicated dividend: cover relates to previous dividend. P/E ratio based on latest annual earnings. *u* Forecast dividend: cover based on previous year's earnings. F Dividend and yield based on prospectus or other official estimates for 1983. Q Gross. T Figures assumed. ◆ Figures or report awaited. ‡ Cover allows for conversion of shares not now ranking for dividend or ranking only for restricted dividends. § Placing price. *p* Pence unless otherwise indicated. ¶ Issued by tender. ‖ Offered to holders of ordinary shares as a "rights." ** Issued by way of capitalisation. §§ Reintroduced. ¶¶ Issued in connection with reorganisation merger or take-over. ‖‖ Introduction. □ Issued to former preference holders. ■ Allotment letters (or fully-paid). ● Provisional or partly-paid allotment letters. ★ With warrants. †† Dealings under Special Rule. ✣ Unlisted Securities Market. ‡‡ London Listing. ‡ Effective issue price after scrip. † Formerly dealt in under Rule 163(2)(a). ‡‡ Unit comprising five ordinary and three Cap. shares. ▲ Issued free as an entitlement to ordinary holders.

RISES AND FALLS YESTERDAY

	Rises	Falls	Same
British Funds	71	5	15
Corpns., Dom. and Foreign Bonds	8	3	65
Industrials	190	183	962
Financial & Props.	58	92	362
Oils	32	12	63
Plantations	—	7	16
Mines	35	44	78
Others	49	46	62
Totals	443	392	1,623

Decrease at Daily Mail and General

Net revenue of Daily Mail and General Trust, an investment holding company, has fallen to £2.07m for the six months to March 31 1982, compared with £3.06m last time. The result includes a proportion of the profits of Associated Newspapers Group, in which the company owns 49.95 per cent of the ordinary shares.

Of the net revenue, £1.37m (£1.35m) is attributable to the Daily Mail and General Trust. Net revenue from investments other than Associated Newspapers was £682,000 (£670,000).

Earnings per 50p share rose marginally from 13.4p to 13.5p and the interim dividend is unchanged at 11p net, payable August 31—the previous year's total was 30p.

Total valuation of investments was £65.5m (£81.1m) and net asset value per share dropped from 800p to 644p.

WEDNESDAY'S ACTIVE STOCKS

Based on bargains recorded in SE Official List

Stock	No. of price changes	Wednesday's closing price pence	Day's change	Stock	No. of price changes	Wednesday's closing price pence	Day's change
Glaxo	20	793	+28	*BAT Industries*	9	453	+ 1
Cable and Wire	18	263	− 7	BP	9	264	+ 4
Bulmer (H. P.)	14	460	+26	Hambro Life	9	277	− 8
Beecham	11	289	+11	MEPC	9	169	+ 2
GEC	11	£10¾	—	Plessey	9	500	+ 8
ICI	11	298	—	RTZ	9	387	− 4
De Beers Defd	10	210	− 1	Ferranti	8	810	+10

ACTIVE STOCKS

Above average activity was noted in the following stocks yesterday

Stock	Closing price pence	Day's change	Stock	Closing price pence	Day's change
Bowater	193	− 7	Firth (G. M.)	150	+13
Consolidated Gold Flds	380	+ 7	Mixconcrete	178	+63
Distillers	187	+13	RTZ	390	+ 3
Dowty	144	+ 9	Shell Transport	392	+ 8
Eagle Star	359	− 6	Thorn EMI	400	+10
Eurotherm	442	+22	Trident TV A	73	+ 5

FT-ACTUARIES SHARE INDICES

These Indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

EQUITY GROUPS & SUB-SECTIONS

Figures in parentheses show number of stocks per section

		Thurs July 15 1982 Index No.	Day's Change %	Est. Earnings Yield % (Max.)	Gross Div. Yield % (ACT at 30%)	Est. P/E Ratio (Net)	Wed July 14 Index No.	Tues July 13 Index No.	Mon July 12 Index No.	Fri July 9 Index No.	Year ago (approx.) Index No.
1	CAPITAL GOODS (209)	393.31	−0.1	9.59	4.27	12.95	393.79	393.79	394.97	393.66	349.38
2	Building Materials (23)	323.60	−0.2	12.74	5.67	9.75	324.34	324.10	322.98	321.27	302.23
3	Contracting, Construction (28)	580.98	−0.6	15.09	5.31	7.81	584.56	586.69	586.60	583.79	557.54
4	Electricals (31)	1552.35	−0.1	6.79	2.89	18.71	1553.61	1549.55	1551.19	1548.94	1140.85
5	Engineering Contractors (11)	477.60	−0.3	13.46	6.33	8.98	479.14	475.28	482.96	479.18	496.88
6	Mechanical Engineering (67)	194.64	+0.5	11.78	6.05	10.24	193.61	194.39	196.58	196.18	208.83
8	Metals and Metal Forming (11)	145.57	+0.2	12.65	8.33	9.79	145.25	145.93	147.49	146.52	145.83
9	Motors (20)	84.38	−0.9	2.95	8.29	—	85.10	85.74	85.83	84.55	98.57
10	Other Industrial Materials (18)	351.86	−0.8	10.53	6.07	11.61	354.72	355.56	357.82	355.94	379.75
21	CONSUMER GROUP (202)	308.71	+0.4	12.91	5.66	9.38	307.33	306.10	305.87	303.72	279.76
22	Brewers and Distillers (22)	326.76	+1.2	14.20	6.26	8.60	322.92	322.65	323.15	319.43	318.51
25	Food Manufacturing (22)	264.75	—	17.59	7.11	6.64	264.86	265.09	264.44	263.18	259.80
26	Food Retailing (14)	634.01	−0.2	9.32	3.53	13.17	635.32	638.97	636.17	634.58	527.47
27	Health and Household products (9)	510.17	+1.3	6.80	3.32	17.36	503.54	488.99	485.67	478.43	337.72
29	Leisure (23)	401.78	+1.2	10.62	5.83	11.89	397.14	396.19	399.36	395.85	431.30
32	Newspapers, Publishing (13)	500.79	−0.1	13.61	6.23	9.25	501.38	502.43	505.33	507.26	504.41
33	Packaging and Paper (14)	137.12	−1.3	17.56	8.05	6.62	138.92	140.42	141.09	141.18	144.50
34	Stores (45)	271.07	+0.2	10.70	5.13	12.38	270.64	269.57	269.89	268.67	261.84
35	Textiles (23)	160.90	—	14.43	6.68	8.44	160.92	161.59	162.19	161.40	159.97
36	Tobaccos (3)	339.40	+0.1	22.79	8.18	4.91	338.89	339.27	336.98	335.23	248.31
39	Other Consumer (14)	262.24	+0.5	6.38	6.17	31.11	260.96	263.19	263.65	262.98	299.67
41	OTHER GROUPS (76)	248.84	+0.2	14.28	6.77	8.50	248.29	248.70	248.15	249.29	224.32
42	Chemicals (15)	323.34	+0.2	14.67	7.39	8.17	322.83	323.18	323.17	323.97	278.18
44	Office Equipment (4)	96.68	+0.1	16.82	9.83	7.30	96.54	95.21	95.43	101.80	108.82
45	Shipping and Transport (13)	559.72	−0.2	19.10	7.95	6.37	560.98	563.84	556.86	554.19	548.42
46	Miscellaneous (44)	329.44	+0.4	12.21	5.73	10.04	328.10	329.10	324.53	328.91	296.62
49	INDUSTRIAL GROUP (487)	329.02	+0.2	11.83	5.28	10.32	328.36	327.78	327.94	326.58	295.72
51	Oils (13)	661.32	+1.4	23.99	8.30	4.72	652.44	646.70	660.31	669.60	707.88
59	500 SHARE INDEX	356.23	+0.4	13.62	5.79	8.79	354.92	353.92	355.15	354.63	329.85
61	FINANCIAL GROUP (117)	243.75	−0.5	—	7.02	—	242.91	243.12	244.33	243.93	271.36
62	Banks (6)	262.34	−0.8	39.19	8.66	2.79	264.34	265.55	266.89	267.77	280.13
63	Discount Houses (9)	234.54	−1.4	—	9.72	—	237.96	238.28	237.99	233.35	277.91
65	Insurance (Life) (9)	266.06	−0.6	—	6.87	—	267.78	268.95	271.41	269.46	276.08
66	Insurance (Composite) (10)	156.13	−1.0	—	9.13	—	156.67	156.16	157.05	155.83	175.00
67	Insurance Brokers (7)	510.26	−2.1	11.04	5.09	12.40	521.38	524.61	526.32	524.77	411.88
68	Merchant Banks (12)	131.75	−0.1	—	6.73	—	131.88	132.21	131.62	131.84	173.29
69	Property (49)	395.47	+0.5	5.76	4.08	23.22	393.62	391.96	393.05	394.72	499.36
70	Other Financial (15)	164.70	+0.2	18.60	6.95	6.22	164.38	165.18	165.91	165.41	181.60
71	Investment Trusts (111)	290.27	−0.1	—	5.65	—	290.61	291.55	290.77	287.53	310.80
81	Mining Finance (4)	195.43	+1.2	16.18	7.26	7.75	193.14	194.70	195.75	187.15	240.78
91	Overseas Traders (18)	357.20	+0.2	14.37	8.97	8.55	356.52	356.66	354.66	357.25	436.87
99	ALL-SHARE INDEX (750)	325.71	+0.2	—	6.06	—	325.01	324.09	325.55	324.65	317.81

FIXED INTEREST

	PRICE INDICES	Thurs July 15	Day's change %	Wed July 14	xd adj. today	xd adj. 1982 to date
	British Government					
1	5 years	113.76	+0.07	113.74	0.07	6.26
2	5-15 years	114.92	+0.42	114.75	0.51	7.23
3	Over 15 years	118.80	+0.37	118.36	—	7.64
4	Irredeemables	121.98	+0.45	121.43	—	7.27
5	All Stocks	115.48	+0.30	115.28	0.14	7.03
6	Debentures & Loans	90.18	−0.03	90.20	—	5.83
7	Preference	64.36	+0.08	64.31	—	3.58

	AVERAGE GROSS REDEMPTION YIELDS		Thurs July 15	Wed July 14	Year ago (approx.)
	British Government				
1	Low Coupons	5 years	10.63	10.61	12.52
2		15 years	12.15	12.22	13.38
3		25 years	12.46	12.51	13.64
4	Medium Coupons	5 years	13.18	13.27	14.78
5		15 years	13.25	13.31	15.38
6		25 years	12.74	12.79	14.94
7	High Coupons	5 years	13.24	13.31	14.85
8		15 years	13.43	13.49	15.55
9		25 years	12.85	12.89	15.16
10	Irredeemables †		12.11	12.17	12.96
11	Debs & Loans	5 years	14.36	14.23	15.79
12		15 years	14.32	14.34	15.90
13		25 years	14.28	14.34	15.91
14	Preference †		14.96	14.98	16.05

† Flat yield. Highs and lows record, base dates, values and constituent changes are published in Saturday issues. A new list of constituents is available from the Publishers, The Financial Times, Bracken House, Cannon Street, London, EC4P 4BY, price 15p, by post 28p.

NEW HIGHS AND LOWS FOR 1982

NEW HIGHS (41)

BRITISH FUNDS (13)
COMMONWEALTH AND AFRICAN LOANS (1)
Australia 6pc 1981-83
AMERICANS (4)
Cons. Foods — IBM Corp.
Gen. Electric — Utd. Tech.
BEERS (2)
Bulmer (H. P.) — Distillers
BUILDINGS (1)
Mixconcrete
CHEMICALS (3)
Allied Colloids — Fisons
Amersham Intnl.
ELECTRICALS (6)
Eurotherm Intl. — Scholes (G. H.)
Jones Stroud — Standard Telephones
Motorola — Whitworth
ENGINEERING (2)
Crown House — Turriff
FOODS (1)
Safeway
INDUSTRIALS (6)
Beecham — Rolfe & Nolan
Glaxo — Siebe Gorman
Johnson Cleaners — Utd. Gas Inds.
MOTORS (1)
Dowty
TRUSTS (1)
Throg. Cap.

NEW LOWS (59)

AMERICANS (3)
Tenneco — Zapata
Tesoro Pet.
BANKS (3)
ANZ — Joseph (Leo.)
Guinness Peat
BUILDINGS (2)
Raine Inds. — Taylor Woodrow
STORES (1)
Allebone
ENGINEERING (9)
Expamet Intl. — Priest (Ben.)
Green's Economiser — Redman Heenan
Laird Grp. — TI
Lee (Arthur) — Weir 10pc Cnv. Pf.
Moss Eng.
INDUSTRIALS (13)
Avon Rubber — Electrolux
Bowater — Francis Inds.
Cape Inds. — Gestetner A N/V
Carlton Inds. — Lead Inds.
Christie-Tyler — Radiant Metal
Cowan de Groot — Stag Furniture
Crosby Woodfield
INSURANCE (1)
Hambro Life
MOTORS (2)
Lucas Inds. — Western Motor
PROPERTY (6)
Centrovincial — Do. A
Clarke Nickolls — Thames Inv. & Secs.
Regional Props. — Do. 12pc Cnv. Pf.
TEXTILES (1)
Montfort
TRUSTS (3)
City & Foreign Inv. — Murray North. B
Jove Inv. Cap.
OILS (6)
Bula Res. — Sun (UK) Royalty
Gecoa Oil — Weeks Aust.
International Pet. — Westfort Pet.
OVERSEAS TRADERS (1)
Crosby House
RUBBERS (5)
Cons. Plant — Malakoff
Highlands — Malay. Plants.
Kuala Kepong
MINES (2)
Paringa — Malaysia Mining
Ayer Hitam

OPTIONS

First Dealings	Last Dealings	Last Declaration	For Settlement
July 12	July 23	Oct 14	Oct 25
July 26	Aug 6	Oct 28	Nov 8
Aug 9	Aug 20	Nov 11	Nov 22

For rate indications see end of Share Information Service

Stocks favoured for the call included Huntley and Palmer, Tozer Kemsley and Millbourn, Suter Electrical, Ladbroke, Cope Allman, Candecca, Cray Electronics, John Brown, Premier Oil, William Leech and Woodside. Puts were done in Burton, British Aerospace and Turner and Newall, while doubles were arranged in Lonrho, Black and Edginton, UDS, RTZ and Premier Oil.

WORLD VALUE OF THE DOLLAR

Bank of America NT & SA, Economics Department, London

The table below gives the rates of exchange for the U.S. dollar against various currencies as of Wednesday, July 14, 1982. The exchange rates listed are middle rates between buying and selling rates as quoted between banks, unless otherwise indicated. All currencies are quoted in foreign currency units per one U.S. dollar except in certain specified areas. All rates quoted are indicative. They are not based on, and are not intended to be used as a basis for, particular transactions.

Bank of America NT and SA does not undertake to trade in all listed foreign currencies, and neither Bank of America NT and SA nor the Financial Times assume responsibility for errors.

COUNTRY	CURRENCY	VALUE OF DOLLAR
Afghanistan	Afghani (O)	68.25
Albania	Lek	5.8551
Algeria	Dinar	4.54
Andorra	Fr. Franc	6.93
	Sp. Peseta	112.335
Angola	Kwanza	30.214
Antigua	E. Caribbean $	2.7025
Argentina	Peso (f) (2)	37500.
	Peso (c) (9)	20000.
Australia	Dollar	0.9884
Austria	Schilling	17.56
Azores	Port. Escudo	85.05
Bahamas	Dollar	1.00
Bahrain	Dinar	0.377
Balearic Is.	Sp. Peseta	112.335
Bangladesh	Taka	22.13
Barbados	Dollar	2.01
Belgium	Franc (C)	47.535
	Franc (F)	51.555
Belize	Dollar	2.00
Benin	*C.F.A. Franc*	346.50
Bermuda	Dollar	1.00
Bhutan	Ind. Rupee	9.5694
Bolivia	Peso	44.00
Botswana	Pula	1.1095
Brazil	Cruzeiro	175.84
Brunei	Dollar	2.1605
Bulgaria	Lev	0.958
Burma	Kyat	7.895
Burundi	Franc	90.00
Cameroun Rp.	*C.F.A. Franc*	346.50
Canada	Dollar	1.2713
Canary Is.	Sp. Peseta	112.335
Cape Verde Is.	Escudo	54.70
Cayman Is.	Dollar	0.835
Cen. Af. Rep.	C.F.A. Franc	346.50
Chad	C.F.A. Franc	346.50
Chile	Peso (O) (5)	46.22
China	Renminbi Yuan	1.9546
Colombia	Peso (O)	64.10
Comoros	C.F.A. Franc	346.50
Congo P'ple Rep. of	C.F.A. Franc	346.50
Costa Rica	Colon (O)	20.00
	Colon	38.17
Cuba	Peso	0.8563
Cyprus	Pound*	2.0536
Czechoslovakia	Koruna (O)	6.10
Denmark	Krone	8.6258
Djibouti Rp. of	Franc	177.72
Dominica	E. Caribbean $	2.7025
Domin. Rep.	Peso	1.00
Ecuador	Sucre (O) (4)	33.00
	Sucre (F)	60.76
Egypt	Pound* (O)	1.4286
	Pound* (1)	1.2225
El Salvador	Colon	2.50
Eq'tl Guinea	Ekuele	224.57
Ethiopia	Birr (O)	2.0522
Faeroe Is.	Dan. Krone	8.6258
Falkland Is.	*Pound**	1.725
Fiji	Dollar	0.939
Finland	Markka	4.7815
France	Franc	6.93
Fr. C'ty in Af.	C.F.A. Franc	346.50
Fr. Guiana	Franc	6.93
Fr. Pac. Is.	C.F.P. Franc	121.739
Gabon	C.F.A. Franc	346.50
Gambia	Dalasi	2.5188
Germany (E)	Ostmark (O)	2.495
Germany (W)	Mark	2.495
Ghana	Cedi	2.75
Gibraltar	Pound*	1.725
Greece	Drachma (6)	70.325
Greenland	Dan. Krone	8.6258

COUNTRY	CURRENCY	VALUE OF DOLLAR
Grenada	E. Caribbean $	2.7025
Guadaloupe	Franc	6.93
Guam	U.S. $	1.00
Guatemala	Quetzal	1.00
Guinea Bissau	Peso	40.5099
Guinea Rep.	Syli	22.7273
Guyana	Dollar	3.0139
Haiti	Gourde	5.00
Honduras Rep.	Lempira	2.00
Hong Kong	Dollar	5.917
Hungary	Forint	38.4043
Iceland	Krona	11.325
India	Rupee	9.5694
Indonesia	Rupiah	659.50
Iran	Rial (O)	81.09
Iraq	Dinar	0.2953
Irish Rep	Punt*	1.3795
Israel	Shekel	25.515
Italy	Lira	1393.75
Ivory Coast	*C.F.A. Franc*	346.50
Jamaica	Dollar	1.7834
Japan	Yen	256.55
Jordan	Dinar	0.357
Kampuchea	Riel	n.a.
Kenya	Shilling	10.994
Kiribati	Aust. Dollar	0.9884
Korea (Nth)	Won	0.94
Korea (Sth)	Won	740.80
Kuwait	Dinar	0.2879
Lao P'ple D. Rep	Kip	10.00
Lebanon	Pound	5.165
Lesotho	Loti	1.1501
Liberia	Dollar	1.00
Libya	Dinar	0.2961
Liechtenst'n	Sw. Franc	2.1263
Luxembourg	Lux Franc	47.535
Macao	Pataca	6.1507
Madagascar D. R.	Franc	364.16
Madeira	Port. Escudo	85.05
Malawi	Kwacha (3)	1.1148
Malaysia	Ringgit	2.371
Maldive Is.	Rufiyaa (O)	3.93
	Rufiyaa (M)	7.55
Mali Rp.	Franc	693.00
Malta	Pound*	2.3892
Martinique	Franc	6.93
Mauritania	Ouguiya	51.29
Mauritius	Rupee	11.10
Mexico	Peso	48.445
Miquelon	Fr. Franc	6.93
Monaco	Fr. Franc	6.93
Mongolia	Tugrik (O)	3.3555
Montserrat	E. Caribbean $	2.7025
Morocco	Dirham	6.1696
Mozambique	Metica	30.5087
Namibia	S.A. Rand	1.1501
Nauru Is.	Aust. Dollar	0.9884
Nepal	Rupee	13.20
Netherlands	Guilder	2.7518
Neth. Ant'les	Guilder	1.80
New Zealand	Dollar	1.354
Nicaragua	Cordoba	10.05
Niger Rp.	C.F.A. Franc	346.50
Nigeria	Naira (O)	0.6739
Norway	Krone	6.3895
Oman, Sultanate of	Rial	0.3456
Pakistan	Rupee	12.1578
Panama	Balboa	1.00
Papua N.G.	Kina	0.7432
Paraguay	Guarani	126.00
Peru	Sol	690.38

COUNTRY	CURRENCY	VALUE OF DOLLAR
Philippines	Peso	8.475
Pitcairn Is.	N.Z. Dollar	1.354
Poland	Zloty (O)	80.00
Portugal	Escudo (7)	85.05
Port Timor	Escudo	n.a.
Puerto Rico	U.S. $	1.00
Qatar	Riyal	3.6397
Reunion Ile de la	Fr. Franc	6.93
Romania	Leu (O)	4.47
Rwanda	Franc	92.84
St. Christopher	E. Caribbean $	2.7025
St. Helena	Pound*	1.725
St. Lucia	E. Caribbean $	2.7025
St. Pierre	Fr Franc	6.93
St. Vincent	E. Caribbean $	2.7025
Samoa (Western)	Tala	0.819
Samoa (Am.)	U.S. $	1.00
San Marino	It. Lira	1393.75
Sao Tome & Principe DR	Dobra	41.6608
Saudi Arabia	Riyal	3.4395
Senegal	C.F.A. Franc	346.50
Seychelles	Rupee	7.6598
Sierra Leone	Leone	1.2585
Singapore	Dollar	2.1605
Solomon Is.	Dollar	0.9303
Somali Rep.	Shilling	6.35
	Shilling	12.46
South Africa	*Rand*	1.1501
Spain	Peseta	112.335
Span. Ports in N. Africa	Sp. Peseta	112.335
Sri Lanka	Rupee	20.85
Sudan Rep.	Pound* (1)	1.1111
Surinam	Guilder	1.785
Swaziland	Lilangeni	1.1501
Sweden	Krone	6.1618
Switzerland	Franc	2.1263
Syria	Pound	3.925
Taiwan	Dollar (O)	39.39
Tanzania	Shilling	9.4493
Thailand	Baht	23.00
Togo Rep.	C.F.A. Franc	346.50
Tonga Is.	Pa'anga	0.9884
Trinidad & Tobago	Dollar	2.409
Tunisia	Dinar	0.6113
Turkey	*Lira (8)*	165.35
Turks & Caicos	U.S. $	1.00
Tuvalu	Aust. Dollar	0.9884
Uganda	Shilling	98.42
Utd. A'b. Emir.	Dirham	3.6729
Utd. Kingdom	Pound Sterling*	1.725
Upper Volta	C.F.A. Franc	346.50
Uruguay	Peso	12.568
U.S.S.R.	Rouble	0.735
Vanuatu	Vatu	112.00
	Aust. Dollar	0.9884
Vatican	Lira	1393.75
Venezuela	Bolivar	4.2937
Vietnam	Dong (O)	2.18
Virgin Is. Br.	U.S. $	1.00
Virgin Is. U.S.	U.S. $	1.00
Yemen	Rial	4.5605
Yemen PDR	Dinar	0.3453
Yugoslavia	Dinar	48.4583
Zaire Rp.	Zaire	5.8456
Zambia	Kwacha	0.943
Zimbabwe	Dollar	0.7634

n.a. Not available. (m) Market rate. * U.S. dollars per National Currency unit. (o) Official rate. (c) Commercial rate. (f) Financial rate. (1) Egypt—Floating rate fixed daily by Central Bank of Egypt for importers, Exporters, Tourists. (2) Argentina—devalued by approx. 17 per cent 6/7/82. (3) Malawi—devalued 26/4/82. (4) Ecuador—devalued by 32 per cent, 14/5/82. (5) Chile—devalued 14/6/82, to be adjusted downwards by 0.8 per cent monthly for the next 12 months. (6) Greece—devalued by 3.2 per cent 15/6/82. (7) Portugal—devalued by 9.5 per cent 15/6/82. (8) Turkey—devalued 14/6/82. (9) Argentina adopts two tier system (c) commercial, fixed daily for imports and exports; (f) all other transactions, set by market.

CURRENCIES and MONEY

Dollar nervous

The dollar was little changed in thin foreign exchange trading. Figures for U.S. industrial production in June were in line with market expectations, and had little impact. Attention continued to centre on the weekly money supply figures to be announced today, which are expected to show a large rise, although the wide range of market estimates, ranging from $4bn to $10bn, added to the quiet, nervous conditions.

Sterling traded within a fairly narrow base, failing to gain any benefit from fears of disruptions to oil supplies because of the conflict between Iraq and Iran.

DOLLAR — Trade-weighted index (Bank of England) 121.3 against 121.5 on Wednesday, and 109.0 six months ago. Three-month Treasury bills 11.80 per cent (12.14 per cent six months ago). Annual inflation 6.7 per cent (6.6 per cent previous month)—The dollar rose to DM 2.4955 from DM 2.4940 against the D-mark; and to FFr 6.9425 from FFr 6.9225 against the French franc. On the other hand, it was unchanged at Y256.10 in terms of the Japanese yen, and fell to SwFr 2.1225 from SwFr 2.1275 against the Swiss franc.

STERLING — Trade-weighted index 91.0, against 91.3 at noon, in the morning, and at the previous close, and 90.6 six months ago. Three-month interbank 12¾ per cent (15 7/16 per cent six months ago). Annual inflation 9.5 per cent (9.4 per cent previous month)—The pound fell 30 points to $1.7200-1.7210 in quiet foreign exchange trading. It opened at $1.7255-1.7265, the highest level of the day, and fell to $1.7155-1.7165 in the afternoon. Sterling fell to DM 4.2950 from DM 4.30; to Y440.50 from Y441.50; and to SwFr 3.6525 from SwFr 3.6675, but rose to FFr 11.9450 from FFr 11.93.

D-MARK — EMS member (weakest). Trade-weighted index was unchanged at 124.2 against 121.7 six months ago. Three-month interbank 9.475 per cent (10.60 per cent six months ago). Annual inflation 5.8 per cent (5.3 per cent previous month)—The Deutsche Mark declined against most major currencies at the Frankfurt fixing. The Bundesbank sold $13.9m when the dollar rose to DM 2.4970 from DM 2.4955 at the fixing. Sterling improved to DM 4.3040 from DM 4.3020, and the Swiss franc to DM 1.1732 from DM 1.1731. On the other hand, the French franc fell to DM 35.970 per 100 francs from DM 36.010. Nervousness about the conflict in the Middle East and future U.S. interest rate trends ahead of this week's money supply figures kept the market cautious.

FRENCH FRANC—EMS member (central position). Trade-weighted index 73.5 against 73.6 on Wednesday and 80.2 six months ago. Three-month interbank 14⅞ per cent (15 1/16 per cent six months ago). Annual inflation 13.8 per cent (13.9 per cent previous month)—The French franc weakened against the dollar at the Paris fixing, but was unchanged against the D-mark, and improved slightly against the Swiss franc. The dollar rose to FFr 6.9415 from FFr 6.8410, and sterling to FFr 11.9695 from FFr 11.8930. The D-mark was unchanged at FFr 2.7795, but the Swiss franc fell to FFr 3.2615 from FFr 3.2670.

ITALIAN LIRA—EMS member (strongest). Trade-weighted index 53.6 against 53.5 on Wednesday and 55.2 six months ago. Three-month interbank 20 1/16 per cent (21½ per cent six months ago). Annual inflation 15.2 per cent (15.5 per cent previous month)—The lira recorded mixed changes at the Milan fixing, losing ground to the dollar and Japanese yen, but improving against sterling, the D-mark and Swiss franc. The U.S. currency rose to L1,394.95 from L1,394.45, and the yen to L5.445 from L5.434. Sterling fell to L2,404.10 from L2,404.60, and the Swiss franc to L654.78 from L655.90. Within the EMS the D-mark eased to L558.78 from L558.90 and the French franc to L201.03 from L201.12.

THE POUND SPOT AND FORWARD

July 15	Day's spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	1.7155-1.7265	1.7200-1.7210	0.23-0.33c dis	−1.95	1.05-1.15dis	−2.56
Canada	2.1765-2.1895	2.1765-2.1775	0.73-0.83c dis	−4.30	2.28-2.38dis	−4.28
Nethlnd.	4.72-4.76	4.73-4.74	1⅜-1⅛c pm	3.48	4⅛-3⅞ pm	3.27
Belgium	81.60-82.20	81.80-81.90	13-23c dis	−2.64	58-63 dis	−2.83
Denmark	14.82½-14.89½	14.83½-14.84½	1⅛-2⅝ore dis	−1.52	8¾-10¾ dis	−2.68
Ireland	1.2446-1.2525	1.2465-1.2475	0.52-0.64p dis	−5.58	1.73-1.89dis	−5.81
W. Ger.	4.28½-4.31½	4.29-4.30	1½-1pf pm	3.49	3⅞-3⅝ pm	3.38
Portugal	145.75-147.00	146.20-146.70	75-255c dis	−13.52	215-745dis	−13.11
Spain	193.70-194.30	194.00-194.20	125-150c dis	−8.50	435-490 dis	−9.53
Italy	2,397-2,408	2,399-2,400	13½-16½ lire dis	−7.51	46-48 dis	−7.82
Norway	10.98-11.03	10.99-11.00	5¼-6¾ore dis	−6.21	10¼-11⅞dis	−4.12
France	11.92-11.98	11.94-11.95	2-3c dis	−2.51	9¼-10¼ dis	−3.26
Sweden	10.58½-10.64½	10.59-10.60	1⅛-2⅝ore dis	−2.27	5½-6½ dis	−2.22
Japan	438-444	440-441	2.02-1.92y pm	5.37	5.55-5.30 pm	4.93
Austria	30.20-30.35	30.27-30.32	12-8⅝gro pm	3.53	23¼-23 pm	3.45
Switz.	3.64½-3.68½	3.64¾-3.65¾	3-2½c pm	9.03	7½-7 pm	7.94

THE DOLLAR SPOT AND FORWARD

July 15	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	1.7155-1.7265	1.7200-1.7210	0.23-0.33c dis	−1.95	1.05-1.15dis	−2.56
Ireland†	1.3765-1.3810	1.3765-1.3785	0.46-0.36c pm	3.56	1.20-1.05 pm	3.25
Canada	1.2645-1.2693	1.2645-1.2655	0.23-0.26c dis	−1.30	0.54-0.57dis	−0.98
Nethlnd.	2.7490-2.7540	2.7490-2.7520	1.30-1.20c pm	5.45	3.93-3.83 pm	5.64
Belgium	47.53-47.58	47.56-47.58	2-4c dis	−0.76	2-5 dis	−0.29
Denmark	8.6175-8.6290	8.6175-8.6225	0.25ore pm-par	0.17	1.00-1.50dis	−0.58
W. Ger.	2.4910-2.5040	2.4950-2.4960	1.16-1.11pf pm	5.46	3.70-3.65 pm	5.89
Portugal	84.90-85.25	85.00-85.25	40-140c dis	−12.69	90-380 dis	−11.05
Spain	112.53-112.68	112.63-112.68	50-60c dis	−5.86	170-190 dis	−6.39
Italy	1,392-1,395	1,392-1,394	6-7 lire dis	−5.59	18½-20 dis	−5.52
Norway	6.3810-6.3890	6.3840-6.3890	2.00-2.40ore dis	−4.14	2.30-2.70dis	−1.57
France	6.9250-6.9550	6.9400-6.9450	0.25-0.45c dis	−0.60	1.10-1.60dis	−0.75
Sweden	6.1530-6.1600	6.1530-6.1580	0.10ore pm-0.10 dis	—	0.65-0.45 pm	0.36
Japan	255.90-256.65	256.05-256.15	1.60-1.52y pm	7.31	4.78-4.68 pm	7.39
Austria	17.56-17.60½	17.60-17.60½	9⅝-8⅞gro pm	6.23	27¼-24¾ pm	5.98
Switz.	2.1200-2.1330	2.1220-2.1230	1.93-1.85c pm	10.68	5.49-5.41 pm	10.27

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency.

CURRENCY MOVEMENTS

July 15	Bank of England Index	Morgan Guaranty Changes%
Sterling	91.0	−32.2
U.S. dollar	121.3	+12.6
Canadian dollar	87.3	−20.0
Austrian schilling	116.4	+26.3
Belgian franc	94.8	−1.7
Danish kronar	81.7	−14.7
Deutsche mark	124.2	+49.0
Swiss franc	144.4	+95.8
Guilder	115.4	+23.2
French franc	73.5	−20.4
Lira	55.6	−58.4
Yen	132.7	+26.4

Based on trade weighted changes from Washington agreement December, 1971. Bank of England Index (base average 1975=100).

CURRENCY RATES

July 15	Bank rate %	Special Drawing Rights	European Currency Units
Sterling	—	0.629999	0.549615
U.S. $	12	1.08595	0.946986
Canadian $	16.50	N/A	1.20230
Austria Sch.	6¾	19.0798	16.6480
Belgian F.	14	51.6903	45.0956
Danish Kr.	11	9.37429	8.17722
D mark	7½	2.71167	2.36510
Guilder	8	2.98957	2.60876
French Fr.	9½	7.53798	6.57540
Lira	19	1514.87	1321.05
Yen	5½	278.215	242.618
Norwgn. Kr.	9	6.94018	6.04566
Spanish Pts.	8	122.223	106.725
Swedish Kr.	10	6.69584	5.83012
Swiss Fr.	5½	2.31108	2.01613
Greek Dr'ch.	20½	76.3083	66.5447

EMS EUROPEAN CURRENCY UNIT RATES

	ECU central rates	Currency amounts against ECU July 15	% change from central rate	% change adjusted for divergence	Divergence limit %
Belgian Franc	44.9704	45.0955	+0.28	—	±1.5501
Danish Krone	8.23400	8.17722	−0.69	−0.97	±1.6430
German D-Mark	2.33379	2.36510	+1.34	+1.06	±1.0888
French Franc	6.61387	6.57540	−0.58	−0.86	±1.3940
Dutch Guilder	2.57971	2.60876	+1.13	+0.85	±1.5004
Irish Punt	0.691011	0.686968	−0.59	−0.87	±1.6691
Italian Lira	1350.27	1321.05	−2.16	−2.16	±4.1369

Changes are for ECU, therefore positive change denotes a weak currency. Adjustment calculated by Financial Times.

OTHER CURRENCIES

July 15	£	$		£ Note Rates
Argentina Peso†	34,810-34,850	20,230-20,270	Austria	30.15-30.45
Australia Dollar	1.6975-1.6995	0.9882-0.9887	Belgium	87.40-88.40
Brazil Cruzeiro	302-303	175.40-176.28	Denmark	14.80-14.94
Finland Markka	8.2083-8.2182	4.7640-4.7660	France	11.90-12.00
Greek Drachma	120.822-121.237	70.25-70.40	Germany	4.28¼-4.32¼
Hong Kong Dollar	10.1180-10.1300	5.8905-5.8945	Italy	2365-2405
Iran Rial	*146	*84.70	Japan	442-447
Kuwait Dinar (KD)	0.4936-0.4942	0.2874-0.2878	Netherlands	4.72½-4.76½
Luxembourg Fr.	81.80-81.90	47.56-47.58	Norway	10.97-11.07
Malaysia Dollar	4.0550-4.0630	2.3610-2.3640	Portugal	142½-159
New Zealand Dlr.	2.3280-2.3320	1.3523-1.3541	Spain	186¼-195¼
Saudi Arab. Riyal	5.9030-5.9095	3.4385-3.4405	Sweden	10.58-10.68
Singapore Dollar	3.6930-3.7000	2.1505-2.1525	Switzerland	3.65½-3.69½
Sth. African Rand	1.9907-1.9942	1.1545-1.1558	United States	1.71½-1.73½
U.A.E. Dirham	6.3010-6.3125	3.6720-3.6740	Yugoslavia	82-95

* Selling rate.

† Rate shown for Argentina is commercial. Financial rate: 63,147-63,187 against sterling 36,700-36,750 against dollar.

EXCHANGE CROSS RATES

July 15	Pound St'rling	U.S. Dollar	Deutschem'k	Japanese Yen	French Franc	Swiss Franc	Dutch Guild'	Italian Lira	Canada Dollar	Belgian Franc
Pound Sterling	1.	1.721	4.295	440.5	11.95	3.653	4.735	2399.	2.177	81.85
U.S. Dollar	0.581	1.	2.496	256.0	6.945	2.123	2.752	1394.	1.265	47.57
Deutschemark	0.233	0.401	1.	102.6	2.781	0.850	1.102	558.6	0.507	19.06
Japanese Yen 1,000	2.270	3.906	9.750	1000.	27.12	8.292	10.75	5446.	4.942	185.8
French Franc 10	0.837	1.440	3.596	368.8	10.	3.058	3.964	2008.	1.823	68.52
Swiss Franc	0.274	0.471	1.176	120.6	3.270	1.	1.296	656.8	0.596	22.41
Dutch Guilder	0.211	0.363	0.907	93.03	2.523	0.771	1.	506.7	0.460	17.29
Italian Lira 1,000	0.417	0.717	1.790	183.6	4.979	1.523	1.974	1000.	0.907	34.12
Canadian Dollar	0.459	0.790	1.973	202.3	5.487	1.678	2.175	1103.	1.	37.60
Belgian Franc 100	1.222	2.102	5.247	538.2	14.59	4.462	5.785	2931.	2.660	100.

FT LONDON INTERBANK FIXING (11.00 a.m. JULY 15)

3 months U.S. dollars		6 months U.S. dollars	
bid 14 7/8	offer 15	bid 15 1/4	offer 15 3/8

The fixing rates are the arithmetic means, rounded to the nearest one-sixteenth, of the bid and offered rate for $10m quoted by the market to five reference banks at 11 am each working day. The banks are National Westminster Bank, Bank of Tokyo, Deutsche Bank, Banque Nationale de Paris and Morgan Guaranty Trust.

EURO-CURRENCY INTEREST RATES (Market closing Rates)

July 15	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	D-mark	French Franc	Italian Lira	Belgian Franc Conv.	Belgian Franc Fin.	Yen	Danish Krone
Short term	12¼-12½	13⅝-13⅝	13-14	8⅝-8⅞	½-1	8⅝-8¾	14½-14⅞	17½-19	14½-15½	14¾-15¼	7-7⅛	14⅛-14½
7 day's notice	12⅜-12⅝	13⅝-13⅞	15½-16½	8⅝-8⅞	1½-2	8 9/16-8 13/16	14½-14⅞	18¼-19⅞	15-16	15⅛-15⅜	7-7⅛	14⅛-14½
Month	12½-12¾	14 1/16-14 3/16	16 1/16-16 3/16	8 13/16-8 15/16	3½-3⅝	8⅞-9	14⅝-15	19⅜-20⅛	14⅝-15⅝	15 1/16-15 5/16	7 1/16-7 3/16	13¾-14⅛
Three months	12½-12⅝	14¾-15	16⅜-16⅝	9-9⅛	4⅜-4½	8 15/16-9 1/16	15½-15⅞	20¼-20⅞	14¾-15¾	15⅜-15½	7 3/16-7 5/16	15-15⅜
Six months	12 11/16-12 13/16	15⅛-15⅜	16¾-17	9⅝-9⅞	5⅜-5½	9 1/16-9 3/16	16½-16⅞	21⅛-21⅞	15-16	15⅛-15¼	7 5/16-7 7/16	16⅜-16¾
One Year	12 13/16-12 15/16	15-15¼	16¾-17	9 11/16-9 15/16	5½-5⅝	9 3/16-9 5/16	17⅜-17¾	21⅝-22¼	15-16	15 1/16-15 5/16	7 5/16-7 7/16	17-17⅜

SDR linked deposits: one month 12¾-12⅞ per cent; three months 12 7/16-12 13/16 per cent; six months 12 13/16-13 3/16 per cent; one year 12⅞-13¼ per cent.

ECU linked deposits: one month 12-12⅜ per cent, three months 12½-12⅞ per cent; six months 12⅞-13¼ per cent; one year 13-13⅜ per cent.

Asian $ (closing rates in Singapore): one month 14⅜-14½ per cent; three months 14⅞-15 per cent; six months 15⅛-15¼ per cent; one year 15⅛-15¼ per cent. Long-term Eurodollar: two years 15⅛-15⅜ per cent; three years 15¼-15½ per cent; four years 15⅜-15⅝ per cent; five years 15⅜-15⅝ per cent; nominal closing rates. Short-term rates are call for U.S. dollars, Canadian dollars and Japanese yen; others two days' notice.

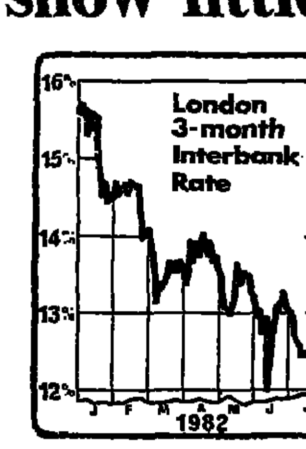
The following rates were quoted for London dollar certificates of deposit: one month 13.95-14.05 per cent; three months 14.55-14.65 per cent; six months 14.70-14.80 per cent; one year 14.65-14.75 per cent.

MONEY MARKETS

UK rates show little change

UK clearing bank base lending rate 12 per cent (since July 14)

Interest rates showed little change in the London money market yesterday in generally featureless trading. There was little influence from U.S. interest rates which were virtually unchanged ahead of today's U.S. money supply figures. In the interbank market overnight money opened at 12⅜-12½ per cent and rose to 12½-12¾ per cent before coming back to 10-11 per cent in the afternoon. Closing balances were taken at 12-12½ per cent however.



The Bank of England forecast a shortage of around £550m with factors affecting the market including bills maturing in official hands and a net take up of Treasury bills −£115m, Exchequer transactions −£360m and a rise in the note circulation of £30m. The bank gave assistance in the morning of £456m, comprising purchases of £28m of eligible bank bills in band 1 (up to 14 days) at 12¼ per cent and in band 2 (15-33 days), £10m of Treasury bills, £5m of local authority bills and £74m of eligible bank bills, all at 12 per cent. In band 3 (34-63 days) it bought £145m of eligible bank bills at 11⅞ per cent and in band 4 (64-84 days) £194m of eligible bank bills at 11¾ per cent.

The bank gave further help in the afternoon of £82m, making a grand total of £538m. The afternoon help comprised purchases of £10m of eligible bank bills in band 2 at 12 per cent, £5m in band 3 at 11⅞ per cent and £67m in band 4 at 11¾ per cent.

In Paris the Bank of France left its money market intervention rate unchanged yesterday at 14¾ per cent when it bought about FFr 20bn of first category paper from the market. Maturity dates are between July 21 and July 31 and August 1 to August 10. In the money market call money remained at 15 per cent.

In Amsterdam figures released yesterday showed a steady increase in domestic liquidity due in part to an inflow of funds from abroad. The relatively high level of funds was a reflection of Dutch balance of payments surplus in part as well as operations by banks and the Treasury to raise funds. The Dutch current account surplus for 1982 is expected to be in the region of Fl 15bn.

EUROCURRENCIES

Eurodollars steady

Euro-dollar rates were mostly unchanged yesterday. Some periods did show very modest increases but the mood of the market still reflected uncertainty as to how interest rates were likely to move in the immediate future. Money supply figures due for release today will reflect the expected "July bulge" with estimates ranging from a $4bn to $10bn increase. Much of this will already have been discounted but there was little activity yesterday as the market awaited today's figures. There may also be some hesitancy ahead of next Tuesday's speech by Mr Paul Volcker, U.S. Treasury secretary, which should provide some enlightenment on U.S. medium term policy. Elsewhere European interest rates showed little change in featureless trading and quotations in the forward market barely moved.

MONEY RATES

NEW YORK

Prime rate	16½
Fed funds (lunch-time)	12⅞-13⅛
Treasury bills (13-week)	11.80
Treasury bills (26-week)	12.12

GERMANY

Lombard	9.00
Overnight rate	8.85
One month	9.40
Three months	9.50
Six months	9.65

FRANCE

Intervention rate	14.75
Overnight rate	15.00
One month	14.5625
Three months	14.625
Six months	14.5625

JAPAN

Discount rate	5.5
Call (unconditional)	7.40625
Bill discount (three-month)	7.28125

LONDON MONEY RATES

July 15 1982	Sterling Certificate of deposit	Interbank	Local Authority deposits	Local Auth. negotiable bonds	Finance House Deposits	Company Deposits	Discount Market Deposits	Treasury Bills Φ	Eligible Bank Bills Φ	Fine Trade Bills Φ
Overnight	—	10-12¾	12⅜-12½	—	—	12¼-13	11½-12	—	—	—
2 days notice	—	—	12¼-12⅜	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 days notice	—	12⅜-12½	12¼-12⅜	—	—	12¾-12⅞	12	—	—	—
One month	12½-12⅝	12 9/16-12 11/16	12¼-12⅜	13-12⅝	12½	12¾	12	12 1/32-12 1/16	12 1/16	12¾
Two months	12½-12⅝	12 9/16-12 11/16	—	12⅝-12½	12½	12¾	11¾-12	11⅞-12	11 31/32	12 5/16
Three months	12½-12⅝	12 9/16-12 11/16	12½	12¾-12½	12 9/16	12¾	11¾-11⅞	11¾-11 29/32	11 27/32	12½
Six months	12½-12⅝	12½-12⅝	12½	12¼-11⅞	12 9/16	—	—	—	11 25/32-11¾	12 9/16
Nine months	12½-12⅝	12½-12⅝	—	12⅝-12¼	12⅝	—	—	—	—	—
One year	12½-12⅝	12 9/16-12 11/16	12½	12⅝-12¼	12⅝	—	—	—	—	—
Two years	—	—	13	—	—	—	—	—	—	—

Local authorities and finance houses seven days notice, others seven days fixed. Long-term local authority mortgage rates, nominally three years 13¾ per cent; four years 13¾ per cent; five years 13¾ per cent. Φ Bank bill rates in table are buying rates for prime paper. Buying rates for four-month bank bills 11 11/16 per cent; four months trade bills 12 5/16 per cent.

Approximate selling rate for one month Treasury bills 11⅞-12 per cent; two months 11¾-11⅞ per cent; three months 11¾-11 25/32 per cent. Approximate selling rate for one month bank bills 12 per cent; two months 11⅞ per cent and three months 11¾ per cent, one month trade bills 12½ per cent; two months 12 5/16 per cent; three months 12¼ per cent.

Finance Houses Base Rates (published by the Finance Houses Association) 13½ per cent from July 1 1982. London and Scottish Clearing Bank Rates for lending 12 per cent. London Clearing Bank Deposit Rates for sums at seven days notice 9 per cent. Treasury Bills: Average tender rates of discount 11.7482 per cent. Certificates of Deposit (Series 5) 12¾ per cent from July 13. Deposits withdrawn for cash 10½ per cent.

FT UNIT TRUST INFORMATION SERVICE

AUTHORISED TRUSTS

INSURANCE & OVERSEAS MANAGED FUNDS

INSURANCES

Abbey Life Assurance Co. Ltd. (z)
1-3 St. Paul's Churchyard, EC4P 4DX. 01-248 9111

Property Fund	228.7	240.8	.....	—
Equity Fund	49.1	51.7	+0.4	—
Property Acc.	267.9	282.1	.....	—
Equity Acc.	48.7	51.3	+0.4	—
Selective Fund	147.6	155.4	+0.7	—
Money Fund	167.6	176.5	.....	—
Convertible Fund	179.9	189.4	.....	—
Prop. Fd. Ser. 4	211.1	222.3	.....	—
Equity Ser. 4	54.8	57.7	+0.4	—
Man. Ser. 4	199.3	209.8	+0.6	—
Money Ser. 4	152.0	160.1	.....	—
Conv. Ser. 4	152.2	160.3	.....	—
Fixed Int. Fd. Ser. 4	119.8	126.2	.....	—
American Ser. 4	109.8	115.6	-1.0	—
High Inc. Ser. 4	115.5	121.6	.....	—
Indexed Inv. Series 4	97.0	102.2	.....	—
Pension Property	319.8	336.7	.....	—
Pension Equity	285.0	300.0	+2.0	—
Pension Selective	149.0	156.9	+0.6	—
Pension Managed	297.1	312.8	+0.6	—
Pension Security	224.3	236.3	.....	—
Pension Fixed Int.	117.0	123.2	.....	—
Pension Indexed Inv.	97.2	102.4	.....	—

Albany Life Assurance Co. Ltd.
31, Old Burlington St., W.1. 01-437 5962

Equity Fd. Acc.	318.5	335.2	-0.1	—
Fixed Int. Acc.	200.3	210.8	+0.3	—
Gtd. Money Fd. Ac.	157.1	165.4	+0.1	—
Intl. Man. Fd. Acm.	139.5	146.8	-0.7	—
Intl. Fxd. Int. Fd.	108.6	114.4	+0.1	—
Prop. Fd. Acc.	159.8	168.1	.....	—
M'ple Inv. Acc.	248.9	262.0	-0.2	—
Equity Pen.Fd.Acc.	456.9	480.9	-0.1	—
Fixed I.Pen.Acc.	325.1	342.2	+0.7	—
G'td.Mon.Pen.Acc.	218.4	229.9	+0.1	—
Intl.Mn.PnFdAcc.	160.8	169.2	-0.8	—
Prop.Pen.Acc.	211.1	222.2	.....	—
M'ple Inv.Pen.Acc.	361.5	380.5	-0.3	—

AMEV Life Assurance Ltd.
2-6, Prince of Wales Rd., B'mouth. 0202 762122

Managed Fd.	194.5	205.0	+0.7	—
Money Fd.	144.4	152.0	+0.2	—
Equity Fd.	150.5	158.6	+1.5	—
Fixed Int. Fd.	97.6	102.8	+1.4	—
Property Fd.	154.3	162.6	.....	—
Managed Pen. Fd.	177.0	186.5	.....	—
Equity Pension Fd.	100.5	105.9	.....	—
Fixed Int. Pens. Fd.	127.9	134.8	.....	—
High Yield Pens. Fd.	127.5	134.4	.....	—
Money Pension Fd.	113.8	119.8	.....	—
Property Pension Fd.	112.1	118.1	.....	—
AMEV/Framlington				
American & Gen. Fd.	139.5	147.0	+1.0	—
Income Fd.	135.4	142.7	.....	—
Intl. Growth Fd.	150.6	158.7	+0.6	—
Capital Fund	140.2	147.7	.....	—
Recovery Fund	97.0	102.2	.....	—

Barclays Life Assur. Co. Ltd.

Crown Life—Continued

St. George Mangd. Fd.	110.2	116.0	.....	—
Lincs & Gen.Fd.	116.1	122.2	.....	—
Sage Fd.	84.5	88.9	.....	—
Heritage Fd.	98.3	103.4	.....	—
DBS Managed	103.4	108.8	.....	—
Crown. Brit. Inv. A		217.2	.....	—
Pens. Mixed. Fd.	149.7	155.1	+0.3	—
Pens. Mang'd. Acc.	111.6	117.4	+0.2	—
Pens. Mang'd. Init.	107.5	113.1	+0.2	—
Pens. Equity Acc.	100.8	106.1	+1.1	—
Pens. Equity Init.	96.8	101.8	+1.0	—
Pens. Fxd. Int. Acc.	109.7	115.4	+0.1	—
Pens. Fxd. Int. Init.	105.6	111.1	+0.1	—
Pens. Money Acc.	109.6	115.3	+0.1	—
Pens. Money Init.	105.3	110.8	+0.1	—

Crusader Insurance PLC
Tower Hse, 38 Trinity Sq, EC3N 4DJ. 488 2323

Growth Prop July 6	101.1	111.2	.....	—
Managed Pens. June 9	117.24	123.41	.....	—

Eagle Star Insur./Midland Assur.
1, Threadneedle St., EC2. 01-588 1212

Eagle/Mid. Units	78.7	81.6	+0.5	6.10

Equity & Law Life Ass. Soc. Ltd.
Amersham Road, High Wycombe. 0494 33377

UK Equities Fund	186.8	196.6	+0.7	—
Higher Inc. Fund	119.6	125.8	-0.1	—
Property Fund	192.3	202.4	.....	—
Fixed Interest Fund	145.1	152.7	+0.5	—
Index Linked Secs Fnd.	93.5	98.4	-0.3	—
Gtd. Deposit Fund	136.1	143.2	.....	—
Nth. America Fund	105.0	110.5	+0.1	—
Far East Fund	81.8	86.1	+0.3	—
International Fund	96.8	101.8	+0.1	—
Mixed Fund	167.7	176.5	+0.4	—

Equity & Law (Managed Funds) Ltd.
Amersham Road, High Wycombe. 0494 33377

Ind. Pen. Equity	194.2	204.4	.....	—
Ind. Pen. Property	144.1	151.6	.....	—
Ind. Pen. Fixed Int.	138.4	145.6	.....	—
Ind. Pen. Index Lk. Sec.	102.9	108.3	.....	—
Ind. Pen. Overseas	145.0	152.6	.....	—
Ind. Pen. Cash	135.5	142.6	.....	—
Ind. Pen. Balanced	153.9	161.9	.....	—
Ind. Pen. Dep. Admin.	135.5	142.6	.....	—

Prices at June 30. Next settlement July 15.
Group Pension Funds—Prices Available On Request.

Family Assurance Society
68, East Street, Horsham. 0403 50255

Family A. Managed	163.6	167.0	-3.2	—
Family B. Managed	89.3	91.2	+0.2	—
Family C. Brit.	72.3	73.8	-3.1	—
Family D. Fixed Int.	110.0	112.3	+0.8	—
Family Capital Mngd.	88.9	90.7	-1.3	—
Family Brit. II	54.2	55.4	-0.8	—

G.T. Management Ltd.
16 Finsbury Circus, Lond. EC2M 7DJ. 01-628 8131

G.T. Pen Bond Fund	96.2	101.3	+0.1	—
GT Pen High Yld Fnd.	90.6	95.4	.....	—
GT Pen Far East Fnd	86.5	91.1	.....	—
GT Pen N Am Fund	93.6	98.6	.....	—

OFFSHORE AND OVERSEAS

FT SHARE INFORMATION SERVICE

BRITISH FUNDS

"Shorts" (Lives up to Five Years)

1982 High	Low	Stock	Price £	+ or −	Yield Int.	Red.
99⅜	95½	Exch. 9¼pc 1982	99⅜	+⅛	9.31	12.31
98¾	94½	Exch. 8¼pc 1983	98¾	......	8.86	11.42
95⅝	91	Exch. 3pc 1983	95⅝xd	+⅛	3.14	10.74
99¾	95¼	Treasury 12pc 1983‡‡	99¾	......	12.03	12.26
98	92¾	Treasury 9½pc '83	97⅞xd	−⅛	9.45	11.54
102	96½	Exch. 13½pc '83	101½	......	13.30	12.16
98⅜	91¾	Exch. 10pc 1983	98⅜	......	10.17	11.73
95½	87⅞	Funding 5½pc '82-84‡‡	95¼xd	−¼	5.77	8.93
99⅜	91⅞	Exch. 11¼pc 1984	99⅜xd	......	11.32	11.71
102½	96¼	Exchequer 14pc 1984	102½	+⅛	13.66	12.39
89¾	81⅛	Exch. 3pc 1984	89½	−¼	3.35	8.98
99⅛	91½	Treasury 12pc 1984	99⅛	+⅛	12.11	12.39
104⅝	96¾	Treasury 15pc 1985	104⅝	+⅛	14.34	12.82
98½	89½	Exch. 12pc Cnv. '85	98½	+¼	12.18	12.64
85	73½	Treasury 3pc 1985	84¾	−¼	3.54	9.19
97½	87½	Treasury 11½pc 1985	97½xd	+⅛	11.79	12.53
98¾	88⅝	Exch. 12¼pc 1985	98¾	......	12.41	12.66
97⅜	86¼	Exch. 11¾pc '86	97⅜	+⅛	12.07	12.66
81½	69	Treasury 3pc 1986	81¼	−¼	3.69	8.86
97¾	86¾	Treasury 12pc '86	97¾	+⅛	12.28	12.72
91	80¾	Treasury 8½pc '84-86‡‡	91	......	9.34	11.37
30—	28⅜	Treas 12¾pc '86 (£30pd)	30¼	+⅛	12.33	12.75
103⅜	91⅞	Exch. 14pc 1986	103	+⅛	13.59	13.02
103⅜	90	Exch. 13¼pc 1987	100⅞xd	+⅛	13.14	12.98
[illegible]						

Five to Fifteen Years

[illegible]

Over Fifteen Years

[illegible]

Undated

[illegible]

Index-Linked & Variable Rate

[illegible]

INT. BANK AND O'SEAS GOVT. STERLING ISSUES

[illegible]

CORPORATION LOANS

[illegible]

COMMONWEALTH AND AFRICAN LOANS

1982 High	Low	Stock	Price £	+ or −	Yield Int.	Red.
[illegible]						
68	58	Do. 3½pc 80-85 Assd.	68	......	5.24	17.00
41	32	Do. 4½pc 87-92 Assd.	40xd	......	11.25	17.60
372	318	Zimbabwe Ann (£100pd)	360	......	—	21.39

LOANS

Public Board and Ind.

1982 High	Low	Stock	Price £	+ or −	Yield Int.	Red.
66	57¾	Agric. Mt. 5pc '59-89	65	......	7.70	12.74
30¼	24¼	Met. Wtr. 3pc 'B'	30½	......	10.20	12.75
114	103	U.S.M.C. 9pc 1982	106xd	......	8.49	—
101½	94	Do. without Warnts.	100xd	......	9.00	—

LOANS—Continued

Financial

[illegible]

Building Societies

[illegible]

FOREIGN BONDS & RAILS

[illegible]

AMERICANS

[illegible]

CANADIANS

[illegible]

BANKS AND HIRE PURCHASE

1982 High	Low	Stock	Price	+ or −	Div. Net	C'vr	Gr's	P/E
282	200	ANZ SA1	200	−3	Q28c	3.3	8.4	3.6
253	205	Alexanders D. £1	238	......	18.5	—	11.1	—
£63½	£56½	Algemene Fl.100	£60	......	Q26%	2.8	9.0	6.1
100	75	Allied Irish	82	+2	Q6.3%	4.0	11.3	2.8
*16⅜	10¼	Arnbacher (H.) 5p.	11½xd	......	0.35	—	4.3	—
260	200	Bk. Ireland £1	225	+5	—	—	10.7	—
3½	2	Bk. Leumi $0.1	3	......	—	—	0.7	—
*227	190	Bk. Leumi (UK) £1	190	......	10.15	—	7.6	—
180	147	Bk. N.S.W. $A1	147	......	Q24c	2.9	9.8	3.5
518	340	Bank Scotland £1	350	......	21.0	4.5	8.6	2.8
425	360	Barclays £1	372	−3	†22.0	5.1	8.4	3.0

BANKS & H.P.—Cont.

[illegible]

Hire Purchase, etc.

[illegible]

BEERS, WINES AND SPIRITS

[illegible]

BUILDING INDUSTRY, TIMBER AND ROADS

[illegible]

CHEMICALS, PLASTICS

[illegible]

CHEMICALS, PLASTICS—Cont.

[illegible]

DRAPERY AND STORES

[illegible]

ELECTRICALS

[illegible]

ENGINEERING MACHINE TOOLS

[illegible]

ENGINEERING—Continued

[illegible]

FOOD, GROCERIES, ETC.

[illegible]

FOOD, GROCERIES—Cont.

[illegible]

HOTELS AND CATERERS

[illegible]

INDUSTRIALS (Miscel.)

[illegible]

INDUSTRIALS—Continued

1982 High	Low	Stock	Price	+ or −	Div. Net	C'vr	Y'ld Gr's	P/E
165	138	Kennedy Sm. 10p	163	......	†14.38	4.1	3.8	8.6
310	180	Kershaw (A.) 5p	180	......	21.75	0.5	17.9	(28.5)
52	41	Kleen-E-Ze Hldgs.	48	......	5.5	0.7	16.4	(14.8)
68	52	L.C.P. Hlds	54	......	3.6	0.5	9.5	(40.5)
63	39½	L.R.C. Int. 10p	62	+½	2.75	◆	6.5	◆
46	34	Lawtex	35	......	†1.5	—	†	—
188	149	Lead Inds. 50p	149	−3	9.66	1.8	9.3	(8.1)
405	277	Lep Group 10p	400	......	17.5	◆	6.5	◆
37	28	Lilleshall 10p	30	......	2.5	—	11.9	—
60	39	Lon. & Liv. 10p	60	......	2.45	2.4	6.0	8.5
102	78	London & Mid'd	88	+9	7.75	◆	13.9	◆
51	36	Lon. & Nthn. Grp.	47	......	3.75	2.1	11.4	5.0
35	23	♯Lon. Priv. Health	35	......	—	—	—	◆
9¼	3½	Long Hmbly. 10p	4	......	B—	—	—	—
48	36	Longton Inds.	46	−2	1.0	—	3.1	—
72	33	Lonsdale Univsl.	65	......	†1.0	0.9	2.2	(73)
195	83	Low & Bonar 50p	84	+1	7.0	1.6	11.9	(6.5)
27½	19	M.Y. Dart. 10p	20xc	......	h1.21	—	8.7	—
168	105	M'c'rthy Ph. 20p	162	......	7.0	2.8	6.2	7.5
110	70	Macfarlane Gp.	109	......	4.0	2.2	5.2	11.2
37	28	Maclellan 20p	36#	......	1.43	1.4	5.7	(15.0)
86	56	Macpherson (D.)	58	......	4.2	1.9	10.6	8.2
62	53	Magnolia Group	61½	+1½	2.3	3.9	5.5	6.1
108	60	Man. Ship Can. £1	60	......	—	—	—	—
49	38	Marley	39	......	2.25	1.5	8.5	(10.1)
40½	29	Marling Ind. 10p	40	+½	1.08	◆	3.9	◆
49	33½	Marshall L'xy. 'A'	35	−1	2.8	3.4	11.4	3.1
88	72	Marshall's Univ	81	+1	0.1	—	0.2	—

LEISURE—Continued

MOTORS, AIRCRAFT TRADES

Motors and Cycles

Commercial Vehicles

Components

Garages and Distributors

NEWSPAPERS, PUBLISHERS

PAPER, PRINTING ADVERTISING

PROPERTY

INSURANCE

LEISURE

PROPERTY—Continued

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TOBACCOS

TRUSTS, FINANCE, LAND

Investment Trusts

INVESTMENT TRUSTS—Cont.

Finance, Land, etc.

OIL AND GAS

OIL AND GAS—Continued

OVERSEAS TRADERS

RUBBERS AND SISALS

TEAS

India and Bangladesh

Sri Lanka

MINES

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Finance

Diamond and Platinum

MINES—Continued

Central African

1982 High	Low	Stock	Price	+ or −	Div. Net	C'vr	Y'ld Gr's
120	75	Falcon Rh.50c	85	......	Q25c	10.3	21.9
33	19	Wankie Col. Z$1	29	......	Q3c	1.2	12.8
21	12	Zam.Cpr.SBD0.24	15	......	—	—	—

Australian

1982 High	Low	Stock	Price	+ or −	Div. Net	C'vr	Y'ld Gr's
23	10	ACM 20c	23	+½	—	—	—
7	1½	Argosy Gold NL 25c	2½	......	—	—	—
151	59	Bond Corp.	62	......	‡Q10c	2.3	10.3
82	58	Bougainville I Kina	69	+1	Q6½c	1.2	5.8
192	147	CRA 50c	170	+4	Q5c	—	1.8
16	10	Carr Boyd 20c	13	......	—	—	—
56	22	Central Pacific	25	−2	—	—	—

Tins

Miscellaneous

1982 High	Low	Stock	Price	+ or −	Div. Net	C'vr	Y'ld Gr's
40	20	Anglo-Dominion	21	......	—	—	—
16½	12	Burma Mines 10p	12	......	0.55	1.0	6.5
130	27	Colby Res. Corp.	42	......	—	—	—
292	170	Cons. Murch. 10c.	200	+10	‡Q60c	1.9	‡
8	4	‡‡Explaura Gold	4	......	—	—	—
105	55	Highwood Res.	65	......	—	—	—
255	160	Northgate C$1	180	+13	—	—	—
468	344	R.T.Z.	390	+3	16.0	2.1	5.9
£108½	£84	Do.9½%Cv.Ln.95-2000	£94	+1	Q9½%	30.0	10.1
20	11	Sabina Inds. C$1	12	......	—	—	—
44	27	✱Southwest C. 10p	32	......	—	—	—
500	270	Tara Explm. $1	285	......	—	—	—

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on "net" distribution basis, earnings per share being computed on profit after taxation and unrelieved ACT where applicable; bracketed figures indicate 10 per cent or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution; this compares gross dividend costs to profit after taxation, excluding exceptional profits/losses but including estimated extent of offsettable ACT. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent and allow for value of declared distribution and rights.

- ● "Tap" Stock.
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- ◆ Figures or report awaited.
- ✱ USM; not listed on Stock Exchange and company not subjected to same degree of regulation as listed securities.
- †† Dealt in under Rule 163(3).
- # Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividend or forecast.
- ◆ Merger bid or reorganisation in progress.
- ‡ Not comparable.
- ♠ Same interim: reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ★ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ǁ No par value.
- ♥ Rate applicable to non-Zimbabwean residents.

§§ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital, cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Subject to local tax. x Dividend cover in excess of 100 times. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1983-84. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1982. K Figures based on prospectus or other official estimates for 1981-82. M Dividend and yield based on prospectus or other official estimates for 1983. N Dividend and yield based on prospectus or other official estimates for 1982-83. P Figures based on prospectus or other official estimates for 1982. Q Gross. T Figures assumed. Z Dividend total to date. Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xd ex capital distribution.

REGIONAL AND IRISH STOCKS

The following is a selection of regional and Irish stocks, the latter being quoted in Irish currency.

			IRISH		
Albany Inv. 20p	40	......	Conv. 9% '80/82	£98⅞	......
Bertrams	17#	......	Nat. 9¼% 84/89	£68⅞	+¼
Bdg'wtr. Est. 50p	415	+5	Fin. 13% 97/02	£76	......
Craig & Rose £1	£121xd	......	Alliance Gas	80	−3
Finlay Pkg. 5p	26	......	Arnott	200	......
Graig Ship. £1	£24	......	Carroll (P.J.)	72	......
Higsons Brew	85	......	Concrete Prods.	50	−3
Holt (Jos) 25p	830	......	Heiton (Hldgs.)	17	......
I.O.M. Stm. £1	102	......	Irish Ropes	34	......
Pearce (C. H.)	£10	......	Jacob	65	......
Peel Hldgs.	151	......	T.M.G.	4	......
Sheff. Refrshmt	79	......	Unidare	45	......
Sindall (Wm.)	220	......			

OPTIONS

3-month Call Rates

Industrials					
Allied-Lyons	8	House of Fraser	15	Utd. Drapery	7
BOC Intl.	15	I.C.I.	24	Vickers	16
B.S.R.	8½	"Imps"	8	Woolworths	5
Babcock	16	I.C.L.	5½	**Property**	
Barclays Bank	42	Ladbroke	15	Brit. Land	7½
Beecham	21	Legal & Gen.	19	Cap. Counties	10
Blue Circle	48	Lex Service	10	Land Secs.	28
Boots	19	Lloyds Bank	42	MEPC	20
Bowaters	24	[illegible]	[illegible]	Peachey	14
Brit. Aerospace	17	London Brick	7	Samuel Props	11
B.A.T.	38	Lucas Inds	30	Town & City	3½
Brown (J.)	7	"Mams"	12	**Oils**	
Burton Ord.	15	Mrks. & Spncr	12	Brit. Petroleum	26
Cadburys	9	Midland Bank	30	Burmah Oil	10
Courtaulds	8	N.E.I.	9	Charterhall	6
Debenhams	[illegible]	Nat. West. Bank	38	KCA	24
Distillers	15	P & O Dfd	[illegible]	Premier	6
Dunlop	[illegible]	Plessey	[illegible]	Shell	30
Eagle Star	37	Racal Elect.	35	[illegible]	22
F.N.F.C.	4	[illegible]	[illegible]	[illegible]	38
Gen. Accident	28	[illegible]	[illegible]	**Mines**	
Gen. Electric	55	[illegible]	[illegible]		
Glaxo	[illegible]	[illegible]	[illegible]		
Grand Met.	17	Tesco	[illegible]		
G.U.S. 'A'	45	Thorn EMI	42	Charter Cons.	25
Guardian	25	Trust Houses	11	Cons. Gold	45
G.K.N.	15	Turner & Newall	11	Lonrho	7
Hawker Sidd	30	Unilever	55	Rio T. Zinc	42

A selection of Options traded is given on the London Stock Exchange Report page

"Recent Issues" and "Rights" Page 27

This service is available to every Company dealt in on Stock Exchanges throughout the United Kingdom for a fee of £600 per annum for each security

FINANCIAL TIMES
Friday July 16 1982

British Shipbuilders plans job cuts

BY HAZEL DUFFY AND JOHN LLOYD

BRITISH SHIPBUILDERS announced plans yesterday to cut its shiprepair workforce by 1,500 in an attempt to stem losses, which have been running at £1m a month.

Tyneside will be most severely affected—up to 1,400 jobs will go at Tyne Shiprepair. Other facilities involved are Grangemouth Dockyard, where the labour force will be reduced by between 40 and 95, and Smith's Dock in Middlesbrough, where BS wants to stop repair work, putting 100 jobs at risk.

BS was consulting officials of the Confederation of Shipbuilding and Engineering Unions (CSEU) yesterday. Union officials were informed of the cuts on Wednesday. The unions plan to stress their resistance to compulsory redundancies at yard meetings in the next few days. They fear that the cuts cannot be achieved by voluntary means.

The principle of achieving job cuts by voluntary redundancy has held generally since the 1979 Blackpool agreement between BS and the CSEU. Any breach of the pact on Tyneside would sour the stability of industrial relations in the industry. BS said yesterday it would, as far as possible, offer transfer or voluntary redundancy.

BS says that it "firmly intends to remain in the shiprepair business," following implementation of the plan, which would reduce the total workforce in shiprepairing from just under 4,000 to about 2,500.

The corporation attributes its losses in shiprepairing to the severe recession in shipping, and to the fact that some repair facilities are in rivers and estuaries where the traditional shipping trade has been reduced.

BS will next week announce its figures for 1981-82. It is expected to show a loss within the limit of £25m set by the Government. The loss limit has been reduced to £10m for the current year, and the corporation says it would have difficulty in meeting the target if it did not take action on shiprepairing.

The CSEU's shipbuilding negotiating committee has called a meeting of delegates from the shiprepair section in Newcastle on August 23 to discuss a response.

However, the unions are inhibited from taking industrial action at Tyne Shiprepair because a no-strike agreement has been made a condition if the yard is to win a shiprepair order from Delta Shipping, a subsidiary of Holiday Inns of the U.S.

The contract with Delta was to have been concluded in March, but is still pending. Officials fear any disruption on the Tyne might lead to the loss of the order and a further loss of jobs, or even the closure of the yard.

Wiggins Teape redundancies, Page 6

Reagan in plea to Arabs for PLO refuge

By Anatole Kaletsky in Washington

HOPES that a bloody Israeli attack on West Beirut can be avoided seemed last night to depend mainly on Arab leaders' response to personal letters from President Ronald Reagan, uring them to accept the 6,000 Palestine Liberation Organisation guerillas trapped in the city.

U.S. administration officials described Syria's refusal earlier this week to provide a refuge for the PLO fighters as "the major stumbling block" to a peace agreement. All other aspects of a disengagement between the PLO and Israeli forces would be easy to resolve if there was a clear promise from an Arab nation to accept the guerillas.

But the negotiations in Beirut by Mr Philip Habib, the U.S. special envoy in the Middle East, have come to a standstill for the moment because no country seems willing ot receive the PLO, acording to officials. If Mr Habib gives up his attempt to negotiate a PLO evacuation, the Israeli army is almost certain to attack West Beirut.

One official said yesterday: "The PLO has received a death sentence from the whole Arab world. The only obstacle to a peaceful settlement is that nobody will take them."

Other officials believe, however, that Syria is likely to announce its willingness to accept the PLO when Mr Abdul Halim Khaddam, the Syrian foreign minister, visits Washington early next week or even this weekend. The fact that the PLO sent the Syrian Government a formal request for refuge on Wednesday may indicate that an understanding has been reached between Syria and the PLO.

President Reagan's willingness to take part personally in the talks between Mr Khaddam and Mr George Shultz, the new U.S. Secretary of State, is also regarded as a hopeful sign. However, there are still fears in Washington that the PLO may seek a last-minute concession from the U.S. before agreeing to evacuation.

Some officials say Mr Habib may even be willing to meet PLO leaders, if this could be arranged. However, another Administration official warned that any PLO hopes of obtaining some form of recognition in exchange for leaving Beirut were founded on "complete confusion" about U.S. policy.

"There is not a chance on earth that the U.S. will recognise the PLO as a condition for withdrawal from Beirut," he said. "The PLO has no cards to play." Its only alternative was to remain in West Beirut and fight.

Yesterday, a senior PLO leader was quoted in Beirut as saying that a battle in the city with the Israelis was a "foremost probability."

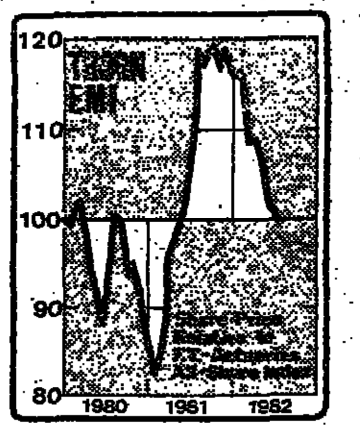
THE LEX COLUMN

Sound of cash at Thorn EMI

EMI must rank as one of the cheapest corporate acquisitions of the decade — at least in retrospect and hardly for the reasons put forward by Thorn at the time. The price was £145m, and subsequently Thorn EMI realised £60m through business disposals: still more dramatically in two years it has squeezed no less than £100m cash out of what was meant to be an ailing music business. Indeed, thanks to the way the music business has been turned round, Thorn EMI has so far been able to fund comfortably the accelerating capital investment programme in its rental business. In the current year spending on this side alone may reach £300m, yet debt may rise by no more than £70m. So the rights issue that is so regularly forecast is by no means inevitable.

The music business has been the driving force behind a 12 per cent increase in overall pre-tax profits for the year to March to £105.4m. Once again, the main difficulties have been experienced in the original Thorn divisions, where reorganisation costs taken above the line have been in the region of £20m for the second year running. In particular the engineering and domestic appliances businesses have found the going tough and if anything the trend appears to have deteriorated in the current year, although lighting should show a pick-up after a clear-out of inventory. The pre-tax outcome may be about £120m. The shares rose 10p yesterday to 400p, where the yield is 5.4 per cent.

Index rose 2.6 to 556.4



Distillers

For the second year running Distillers has done rather better than its own gloomy half-time prognostications. Pre-tax profits of £178.5m, compared with £181.0m in 1980-81, do not amount to much of a decline considering that last year's figure contained £9m of investment gains. Current cost earnings are marginally up, and DCL is again pouring out nearly all of them, which means a surprise penny on the dividend—and 13p on the share price, up to 187p yesterday. Working capital reductions and £31m from the EEC leave DCL with even more cash than usual, and it has no obvious use for the money at the moment.

Distillers has almost as many sluggish markets as it has brands of scotch—offtake is low from the U.S. and Venezuela to Germany. Still, overseas earnings were boosted by between £5m and £10m as a result of the lower pound, which will continue to be a help in the current year. As DCL waits hopefully for signs that the slide in volume is over the yield on its shares is a rock-solid 9.4 per cent. But plenty of its shareholders are sitting on losses.

Unigate

The guarded optimism expressed by Unigate at the interim stage has not been fulfilled, and after being £5½m ahead after six months pre-tax profits closed the year at £38.3m against £38.0m. The bad weather is said to have cost £2m of profits in milk and transport, but the real problem continues to be the meat business. This turned round into £5m of loss at the trading level (from £3½m of profit) after absorbing £2½m of balance sheet provisions—and that is before £14½m of below-the-line charges which leave the group with no retained earnings.

The equity market is so thoroughly disenchanted with Unigate that only bid rumours—improbable, so far—awaken much interest in the shares. But it would be wrong to ignore both what is happening in the re-organised milk business, where operational efficiencies are pushing profits ahead this year despite unsatisfactory prices, and the decent performances of Giltspur and Wincanton. Meat will be dragged painfully back into profit over the next couple of years, and although Unigate is not awash with obvious growth businesses, that is nothing unusual in the food sector. The 11.4 per cent yield on the shares at 86p is more or less saying that the £75m a year capital investment programme, much of it in milk, is a waste of money. It is up to Unigate now to prove the market wrong.

Dowty

Dowty's share price has turned in one of the more erratic performances on the Stock Exchange over the last couple of years. From a glamour rating in the spring of 1981, when it peaked at 204p, it tumbled to a low of 113p earlier this year. Yesterday, after an 8 per cent rise in pre-tax profits to £39.1m was reported for the year to March (in spite of an 18 per cent decline at the interim stage) the shares rose 9p to close at 144p.

The aerospace division has recouped the strike-affected decline of the first half, but the underlying picture is fairly flat and there is unlikely to be much of an improvement in the current year. Mining equipment is also back on a plateau, having completed its redundancy programme. Both the electronics and industrial divisions may push ahead cautiously. With demand stagnant, the pre-tax outcome may be up 5 per cent or so this year. The yield is 3.7 per cent and p/e about 15, fully taxed, so the rating looks appropriate—at last—for a well managed company with solid, if not dramatic, long term growth prospects.

Assd. Newspapers

The revamped Mail on Sunday vouches for the many editorial skills of the Associated Newspaper Group. Perhaps it is now time that the company applied those skills in its own statement of earnings.

One palty sheet informed the City yesterday that pre-tax profits had halved to £5.4m for the six months to March. Eyebrows quickly began to arch as this reporting period ended before Mail on Sunday arrived. The company had previously announced a £12m budget for the new paper's start-up costs and initial losses, but yesterday's uncommunicative missive left it completely unclear whether the paper was on target or not.

One thing is definitely off-target. The Mail on Sunday's circulation has not yet exceeded 900,000, which is significantly short of the paper's initial goal of 1.25m. Perhaps FT readers would care to play our Casino game — no prizes — of guessing Associated Newspapers' full-year-results? The shares yield 8.8 per cent at 175p.

Egypt in military deal with Spain

By Robert Graham in Madrid

EGYPT HAS agreed to buy naval vessels, military trucks, and armoured personnel carriers from Spain worth $1bn (£581m).

The deal is Spain's biggest military export order. There are prospects of Egypt's taking further options, increasing its value, with spares, to around $1.4bn.

The order comes with Spain itself about to announce its own biggest foreign military purchase — 85 F-18a multi-purpose combat aircraft from McDonnell-Douglas of the U.S., costing over $2bn.

The Egyptian deal is expected to be finalised by the end of the month. The principal details outstanding are reported to be financial.

Egypt will spend $600m on two corvettes and six patrol boats from Spain's state-controlled naval shipyard, Bazan. The remaining $400m will go on 3,000 military trucks and 600 four-wheel drive amphibious armoured personnel carriers, all to be supplied by the state-run commercial vehicle producer, Enasa.

The Egyptian Government is also understood to be anxious to take out options on two more corvettes and up to 300 personnel carriers.

The order will provide an important cash injection into these two companies, which have been experiencing financial losses and also operating under capacity.

This is Bazan's first breakthrough into the Egyptian market.

The size of the deal means special Cabinet approval will be necessary. This is because Spain has low limits on the level of export guarantees available for any one country. These would not cover the sums at risk.

AP adds: Spain's final decision to order the F-18A aircraft could come at a cabinet meeting next week.

Nott may face fresh battle with Treasury over Falklands costs

BY PETER RIDDELL

THE COST of the Falklands operation of more than £500m in the current financial year, may come partly from within the existing £14.1bn defence budget and not in addition to it, as argued by Mr John Nott, the Defence Secretary.

These signs of renewed conflict between Mr Nott and Treasury ministers appeared when the Cabinet yesterday had its usual July preliminary discussion about public spending plans.

The discussion was intended to set the framework for the bilateral discussions during the summer between the Treasury and other departents about individual programmes, leading to final decisions in the late autumn.

All the indications last night were that the existing broad strategy of trying to contain the size of the public sector was confirmed. Treasury ministers will now attempt to eliminate the £5bn additional expenditure being sought by spending ministers and try to get as close as possible to the figure of £121bn for 1983-84 proposed in last March's white paper. However, no revised total has yet been agreed.

Several ministers are believed to have been expressing concern about the weak state of the economy and the absence of the recovery promised by the Treasury. Mr Patrick Jenkin, the Industry Secretary, backed by the Scottish and Welsh Secretaries, is believed to have urged government action in the autumn to help reduce industry's costs as a priority, ahead of any cut in income tax.

On the defence budget, it has become increasingly clear that the concordat reached between Mr Nott and the Treasury is open to several interpretations. Mr Nott has claimed that the estimate of £500m this year and of £250m for replacement of lost equipment in each of the following two years is on top of the existing budget and should be financed out of the contingency reserve.

Treasury ministers have argued that the cost of the operations will comeout of the contingency reserve, only "if necessary." The Treasury has pointed to substantial underspending by the Ministry of Defence are argued that any margin below the £141bn ceiling should be used up before any commitment of the contingency reserves.

A further battle is developing between the Treasury and Mr Michael Heseltine, the Environment Secretary, over local authority spending. The Treasury is concerned about the signs of very large overspending by councils, both in the current year and in their plans for next year. It is even raising the possibility of further central controls to eliminate this overshoot.

Mr Heseltine has argued that it would be very difficult to reduce spending by the local authorities themselves and that the best solution may be to reduce the grant which councils receive from Whitehall. This would switch the burden of financing on to the councils themselves, while reducing Central Government's commitment.

There is also concern about the potential financial course of nationalised industries, notably British Rail and British Steel.

Restoring grip on spending, Page 8; defence package for Falklands, Page 6

Continued from Page 1

BR plans workforce ballot

seems to be too low to avert a closure.

However, further efforts to avert the closure will be made today at a specially-convened meeting of the TUC's inner cabinet, the finance and general purposes committee.

This is rarely called to consider individual disputes. The last recorded instance was during the lorry drivers' strike in the 1978-79 "winter of discontent."

The committee, which includes Mr Ray Buckton, Aslef general secretary, seems likely to issue a statement giving only qualified support to Aslef. Many senior TUC figures are known to disapprove of the union's rigid stance.

Mr Len Murray, TUC general secretary, completed his round of talks with the unions yesterday, seeing Mr Tom Jenkins, general secretary of the white-collar Transport Salaried Staffs' Association.

Both Mr Buckton and Mr Sid Weighell, NUR general secretary, yesterday also met Mr Michael Foot, the Labour Party leader. Mr Weighell denied in a letter to Mr David Howell, the Transport Secretary, that he had clashed with Mr Foot over the strike at a private meeting earlier this week.

There were indications in Labour circles yesterday that Aslef might be ready to relax slightly it srigid opposition to flexible rostering.

The Labour hope is that BR will improve sufficiently on proposals it agreed to in talks this week with the Advisory, Conciliation and Arbitration Service and enable Aslef's policy-making national conference to be recalled.

Aslef leaders are believed to be ready to recall the conference if they receive an offer which they feel stands a chance of being accepted. However, BR seems unlikely to deviate far from the proposals it was prepared to accept at Acas, which Aslef did not accept.

Hazel Duffy, Transport Correspondent writes: British Rail is expected to have to continue paying substantial sums to salaried staff and possibly also to members of the National Union of Ralwaymen if the threatened rail shutdown materialises.

BR will have to meet the salaries and wages bill by borrowing against its £150m temporary borrowing limit set by the Government and speeding up the saleof property and other assets. To date, it has drawn between £75m and £80m against this limit.

Money is still coming in to BR in payment for freight carried in the past month, but as this sourceof finance dries up BR will have recourse only to borrowing.

The Government has made it clear to BR that it will act as the final guarantor to enable BR to continue borrowing, which it is doing mainly from the banks and local authorities. The temporary borrowing limit is thought to be flexible, so that if the strike continues for several more weeks, BR will be able to exceed its limit.

Employees who have contracts with BR, including many of the salaried staff, would have the right to sue BR it it decided to cease paying them. BR could also find itself having to pay NUR members if the union decided to take out an injunction against BR following the suspension ofi ts guaranteed working week.

If the courts found in favour of the union, the wages would have to be paid.

Continued from Page 1

Sizewell B

issues as more design and safety information became available from the CEGB.

Sir Walter Marshall, chairman of the CEGB, said he did not believe that the issues identified by the nuclear inspectors would raise the cost of Sizewell B, currently estimated at £1.15bn.

He believed the issue on which the CEGB's case was most at risk was the fear first voiced by the UK Atomic Energy Authority that the fuel might "balloon" under certain accident conditions.

At worst, it could mean a lowering of Sizewell B's 1,150 Mw rating. "But I'm betting my reputation that we won't have to do that," said Sir Walter.

He added that the "task force" which had salvaged the Sizewell B design—the project was almost abandoned last summer — would continue under his chairmanship until the public inquiry.

* *Sizewell B. A review by HM Nuclear Installations Inspectorate of the pre-construction safety report. SO: £5.50.*

Battle for Basra

Continued from Page 1

from Kuwait to Baghdad, which run close to Basra. One report yesterday said the Iranians had already blocked the main road south of Basra, presumably by air attacks. Severance of the road from Kuwait would leave Iraq totally dependent for supplies from abroad on its other two overland routes, from Jordan and Turkey.

U.S. officials said the Iranian assault was led by waves of infantry at night. Iran seemed willing to take "massive casualties," according to the U.S. assessment.

Richard Johns writes: Following a month of stagnation and decline, oil spot market prices rose yesterday in reaction to the Iranian invasion of Iraq. That proved to be only an apprehensive twinge, however, and price movements were not large. Loading in Iran was reported to have been unaffected.

Arabian Light was up by 55 U.S. cents $31.50 (£18.29) per barrel, still well below the official selling price of $34. Iranian Light, which should command a slight premium, rose only by 25 cents and was quoted at an average of $30.75.

Bunzl abandons £16m bid for Bemrose

BY CHARLES BATCHELOR

BUNZL, the London-based paper and packaging group, yesterday abandoned its £16.1m bid for Bemrose, the Derby security printer. Within hours of the bid lapsing, Mr Robert Maxwell's British Printing and Communication Corporation (BPCC) said it had placed its entire Bemrose holding—2.245m shares or 19.97 per cent of the equity—with institutions.

Mr Maxwell said he had decided not to make a "hostile bid" for Bemrose. BPCC placed the shares at 142p each, after paying an average 133p, to show a profit of £202,000 on the transaction.

The Bunzl bid began with an unsuccessful "dawn raid" nearly two months ago. It foundered on the opposition of Bemrose's board and counter-buying from BPCC. N. M. Rothschild, advising Bunzl, believed the company's bid would have been successful but for the actions of BPCC.

The Bunzl offer was incerased from £13.8m, or 120p a share, to £16.1m, or 155p a share nominal, in the course of the bid battle. It received acceptances from holders of only 68,942 shares, or 0.6 per cent of the ordinary equity.

Bunzl held no shares prior to its offer and failed to gain any in its early morning raid on May 18. It did pick up 1.59m shares, 13.8 per cent of the Bemrose equity, however, last Friday.

Under the City Take-over and Merger Code Bunzl may not now make another bid for Bemrose for one year, though it may respond if another bidder emerges.

Kleinwort Benson, advisers to Bemrose, said they made a bid for Mr Maxwell's shares as soon as the Bunzl offer lapsed and arranged for their placement with institutions. Kleinwort said: "Mr Maxwell has made a nice profit."

Kleinwort also plans to approach Bunzl to see if it is interested in placing its holding.

Bemrose said the lapsing of Bunzl's bid was "a great success for the company and demonstrated the tremendous loyalty of the shareholders."

Bemrose's shares traded at 86p before the bid. They fell 4p to 140p yesterday after the lapse of the Bunzl offer but before news of the BPCC placement. Bunzl's shares rose 2p yesterday to 165p.

Weather

UK TODAY

BRIGHT INTERVALS with showers.

S.W. and E. Scotland, N.W. and E. England

Cloudy, outbreaks of rain, with bright intervals. Max 17C (63F), but cooler in north.

S. England, Midlands, Wales, N. Ireland and N.W. Scotland

Sunny intervals, scattered showers. Max 19C (66F).

Outlook: drier and brighter but rain in north west.

WORLDWIDE

		Y'day midday °C	°F			Y'day midday °C	°F
Ajaccio	S	30	86	L. Ang.†	C	18	64
Algiers	S	30	86	Luxmbg.	S	25	77
Amsdm.	F	24	75	Luxor	S	40	104
Athens	S	24	75	Madrid	S	29	84
Bahrain		—	—	Majorca	S	32	90
Barclna.	S	28	82	Malaga	S	24	75
Beirut		—	—	Malta	S	35	95
Belfast	C	16	61	M'chstr	R	14	57
Belgrd.	F	27	81	Melbne.		—	—
Berlin	S	31	88	Mx. Ct.†		—	—
Biarritz	C	22	72	Miami†	S	26	79
Bmghm.	C	15	59	Milan		—	—
Blackpl.	R	14	57	Montrl.†	S	21	70
Bordx	F	24	75	Moscow	C	25	77
Boulgn.	C	19	66	Munich	S	29	84
Bristol	R	18	64	Nairobi		—	—
Brussels	F	24	75	Naples	S	30	86
Budpst.	C	27	81	Nassau		—	—
Cairo		—	—	Nwcstl.	R	13	55
Cardiff	C	18	64	N York†	C	21	70
Cas'b'ca	F	21	70	Nice	S	28	82
Cape To		—	—	Nicosia		—	—
Chicg.†	C	22	72	Oporto	S	22	72
Cologne	S	27	81	Oslo	S	26	79
Conhgn.	S	25	77	Paris	C	20	68
Corfu	S	31	88	Perth		—	—
Denver†	S	24	75	Prague	S	30	86
Dublin	C	17	63	Rykjvk.	S	14	57
Dbrvk.	S	26	79	Rhodes	S	29	84
Ednbgh.	R	12	54	R'o J'o†		—	—
Faro	F	23	73	Rome	S	32	90
Florence		—	—	Salzbrg.	S	29	84
Frankft.	S	30	86	S'ctsco†		—	—
Funchal	R	19	66	S. Mrtz.		—	—
Geneva	S	28	82	Singapr.		—	—
Gibrltr.	S	27	81	S'tiago†		—	—
Gl'sg'w	R	14	57	Stckhm.	F	23	73
G'nsey	R	16	61	Strasbg.	S	27	81
Helsinki	S	22	72	Sydney		—	—
H. Kong		—	—	Tangier	S	23	73
Innsbrk.	S	28	82	Tel Aviv	S	28	82
Invrnss.	R	12	54	Tenerife	C	25	77
I.o.Man		—	—	Tokyo		—	—
Istanbul	S	26	79	T'r'nto†	S	18	64
Jersey	C	16	61	Tunis	S	40	104
Jo'burg		—	—	Valencia	S	30	86
L. Plms.	S	24	75	Venice	F	27	81
Lisbon	C	21	70	Vienna	S	28	82
Locarno	S	28	82	Warsaw	F	26	79
London	C	20	68	Zurich	S	27	81

C—Cloudy. F—Fair. Fg—Fog. H—Hail. R—Rain. S—Sunny. Sl—Sleet. Sn—Snow. T—Thunder.
† Noon GMT temperatures.